

ANNUAL REPORT

Development of a Cooperative Nationwide Network
for Technology Transfer

VOLUME IV

STATE-FUNDED SEED CAPITAL PROGRAMS
AVAILABLE FOR NEW-TECHNOLOGY-BASED VENTURES

Researched and Compiled by
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ACKNOWLEDGMENTS

I am particularly indebted to my friend, Dr. Berkwood Farmer, Executive Director of the Rural Virginia Development Foundation, for sharing with us the results of related research on state resources for seed capital, which he undertook in 1988 for his overlapping concerns, and which have helped us in generalizing on the significance of these state programs. I am similarly indebted to Ronald Thornton, Director of the Southern Technology Applications Center (STAC) for sharing his report on a seed capital study which STAC undertook for Florida.

In one dimension, this report is an outgrowth of this firm's cooperation last year with the Minnesota Governor's Office of Science and Technology which led to their report, State Technology Programs in the United States: 1988, and our Centers of Excellence: A Catalogue. This report parallels the latter document in expanding substantially on one of the types of state programs summarized in the Minnesota report. Our thanks are due both to the late Beverly Jones, Director of that office at the time of our most extensive interaction, and to the present Director, Gil Young.

The senior "Science and Technology for Industry" officials in the several states have been cooperative, as have the officials listed as contacts for the several funds.

Behind all of this effort, appreciation must be expressed to Mr. Henry Clarks, Director, and Mr. Leonard Ault, Deputy Director, of NASA's Technology Utilization program. Their vision in recognizing the opportunities for Federal-state cooperation, their interest in pursuing such cooperation based on adequate and timely information, and their unstinting commitment to the rapid movement of Federally-sponsored new technology into commercial practice have provided us the means, the context, and the encouragement to make this document a reference work both for venture development and for intergovernmental cooperation.

PAUL R. BROCKMAN

INTRODUCTION

Dynamic changes have been occurring across America in the arrangements used to fuel the development of new technology to the point at which it can be introduced into the market place as new or improved products, processes or services.

For a generation, or since the end of World War II, the bulk of this funding came from:

- venture capital firms, investing in entrepreneurial ventures;
- large corporations, reinvesting in themselves;
- private individuals ["angels"], in lieu of
or in combination with venture firms; and
- entrepreneurs and their early friends and relatives.

In recent years, changes both in these resources and in other economic factors: (1) have reduced the first source from a stream to a trickle as venture firms turn to investing in expansion and LBO's in lieu of start-ups; (2) have significantly changed the terms of availability for the last two, and have led to a shift on the part of some large corporations from internal to external investing.

Drivers of these changes include (among others) the continuing acceleration of the rate of technological change in all fields; with impacts on production and on products; changes in the Federal tax code; the rise of international competition in domestic markets; the introduction of radically new information storage, processing and communications technologies affecting the internal operations of most large corporations; and the shift in leadership for economic development from national and local to state and regional organizations.

In this report, we are concerned with the states' programs to fund new technology-based industrial and commercial ventures at this seed stage. After reviewing 20 states' programs in 1987 and 1988, Dr. Berkwood Farmer of Virginia's Rural Virginia Development Foundation developed several generic categories to describe these efforts, and cited several examples. To quote Dr. Farmer:

"Kansas is an example of a state using the tax incentive to increase the availability of venture capital. Arkansas, Indiana, and Iowa demonstrate a more direct use of state funds to enhance the development of new products and services for new start-up or existing businesses. Connecticut, Florida, and Michigan are examples of states pursuing the public/private route of economic development. Connecticut's program is designed to support basically high tech businesses, while Michigan and Florida support a more general business growth and development environment. The financing models developed by Connecticut, Michigan and Florida are very similar to the RVDF's model, i.e., the state establishes a non-profit organization that serves as a catalyst to the private sector in increasing the availability or supply of venture capital....

"In reviewing the information on the states, the following principles stand out:

- "1. States providing financial resources for research and development of new products and services normally do not take an equity position in the business but recoup their investments in the form of royalties.
- "2. Seed capital is normally used to support research and development of a specific product or service -- considered to be risk [patient] capital.
- "3. The source of state funds used for investment purposes comes from state appropriations, bonds, and other non-appropriated sources such as revenue from lotteries, liquor, oil and gas, etc.
- "4. States increase the accessibility of capital to businesses, rather than subsidizing its cost.
- "5. States supplement rather than substitute for private capital markets, targeting their limited resources to clearly identified private capital market gaps.
- "6. States demonstrate the viability of businesses that private markets find too risky with the idea to eventually shift future financial needs of such businesses to private financial institutions.
- "7. States send a signal to their citizens that they are prepared to insure that capital is equitably distributed to qualified businesses and entrepreneurs.
- "8. Even though state funds and incentives are used to leverage or attract private sector funds, most states leave the investment decision-making process to the specific financial institutions that were established.
- "9. Without state leadership and financial assistance, the capital gaps will continue to exist for the foreseeable future.
- "10. Leadership from state officials and/or the state legislature is a necessary prerequisite to raising private sector capital."¹

¹Dr. Berkwood M. Farmer, "Innovations in Economic Development Efforts -- Other States and the Rural Virginia Development Foundation," Unpublished paper delivered at the Foundation's Board Meeting, Blacksburg, VA, June 1 and 2, 1988

PURPOSE

This report has been prepared for use by the NASA Technology Applications Team, NASA Technology Utilization Offices, NASA Industrial Application Centers, and NASA Applications Engineering Program Managers. It exists to help these officials identify possible sources of mutually leverageable capital funds which may be available for NASA Applications Engineering projects. Its validity is enhanced by the fact that the information on each state and program has been either reviewed or provided by cognizant officials in the states. The one caution that is in order is that new programs emerge every year, and existing ones are changed. States which are identified as having no state-sponsored seed-capital funds at the time this was prepared may well have them within a year or two.

We have not attempted to analyze each state program in terms of Dr. Farmer's taxonomy, but include it here as background to our presentation of the individual state efforts. The purposes of our work at this time are such that the information we present in the following pages is what matters in mutually leveraging Federal, state and private seed-stage investments.

This information was initially compiled by Mr. Phelps from information in LFW Management Associates, Inc. files. These data sheets were sent to cognizant state officials for review and approval or correction. Their cooperation in making corrections, in referring us to others, and in providing new information has been noted before. Mr. Brockman joined in rewriting most of the final data sheets and in editing and overseeing preparation of the final document.

ALABAMA

Alabama has no State-sponsored seed capital fund.

ALASKA

Alaska's Industrial Development and Export Authority is sponsoring a study to define parameters for a State-leveraged, privately managed venture capital fund. The target is a fund of \$30 million, including \$3 million from the State and the balance from private sources. Several private venture capital firms are known to be interested in raising the private dollars and managing the fund. Further information on the status of the proposed fund should be available by late summer 1989 from:

Mr. Bill Pollock
Development Officer
Division of Business Development
Department of Commerce and Economic Development
Box D
Juneau, Alaska 99811-0800
(907) 465-2017

ARIZONA

Arizona has no State-sponsored seed capital fund.

ARKANSAS

1. SEED CAPITAL INVESTMENT PROGRAM

Contact

Mr. James T. Benham
Vice President, Finance
Arkansas Science and Technology Authority
100 Main Street, Suite 450
Little Rock, Arkansas 72201
(501) 371-3554

Overview

Promotes the development of technology-based businesses and industries in Arkansas by providing financial assistance to small businesses that are unable to secure capital from traditional sources.

Funding Mechanism

Debt, equity, royalties, or some combination. The Fund provides up to 25 percent of the start-up capital (maximum \$500,000) required by businesses that have a technology or scientific focus. ASTA's willingness to share part of the risk allows the firms to leverage funds from private sources that might otherwise be unavailable.

Budget

\$1.8 million one-time funding in 1986, to capitalize a revolving fund.

Investment Strategy

The Fund is expected to become self-supporting through subsequent debt repayment, repurchase or resale of stock, and/or royalty income.

Technology Focus

Not specified.

Eligibility

The legislative mandate of the program is to provide initial financing to Arkansas-based enterprises with technically or scientifically innovative products or services, when traditional bank financing is not available. The firm must have a "reasonable" chance to succeed and repay the investment, and it must demonstrate potential to create new jobs in Arkansas.

Procedures

- o **Application.** — Provided upon request.
- o **Evaluation.** — Due diligence by staff.

Terms and Conditions

Negotiable.

Other Forms of Assistance

Not available.

2. APPLIED RESEARCH GRANT PROGRAM

Contact

Dr. J. P. Gentry
Vice President, Research
Arkansas Science and Technology Authority
100 Main Street, Suite 450
Little Rock, Arkansas 72201
(501) 371-3554

Overview

The program supports State efforts in applied research relative to science and engineering by promoting research partnerships between private industry and Arkansas' research universities.

Funding Mechanism

Matching grants -- program will provide matching (up to two-to-one) for applied research projects undertaken as university-industry partnerships, with balance coming from industry. (Parallel program provides grants for 60 percent of basic research projects, with universities responsible for balance.)

Budget

\$1.8 million total (FY87-88 biennium) for Basic and Applied Research Grants Programs. In FY86 the proportion was \$621,000 in basic grants and \$98,000 applied grants. FY89-90 biennial budget not available, but in FY89 the program awarded \$230,000 in basic grants and \$177,000 in applied grants.

Investment Strategy

Not applicable.

Technology Focus

Not applicable.

Eligibility

State colleges and universities.

Procedures

- o Application. — Upon request.
- o Evaluation. — Peer review.

Terms and Conditions

Restricted.

Other Forms of Assistance

The Research and Development Tax Credit Program provides additional incentives for businesses to participate in Basic and Applied Research Grants Programs: companies or individuals who make donations or below-cost sales of equipment to qualified educational institutions will receive credits against their State income taxes.

CALIFORNIA

1. COMPETITIVE TECHNOLOGY PROGRAM (CompTech)

Contact

Ms. Anne Sheehan
Office of Competitive Technology
California Department of Commerce
1121 L Street, Suite 600
Sacramento, California 95814
(916) 322-5139

Overview

Established in 1988 to facilitate technology transfer between the private and public sectors in California. Provides grants to projects that transfer technology from university and national laboratories to commercial use.

Funding Mechanism

State general funds.

Budget

\$6.6 million in FY89.

Investment Strategy

Not applicable.

Technology Focus

The Office of Competitive Technology has authority to establish technology priorities, but it has not yet done so.

Eligibility

Non-profit or public agencies, for projects involving the transfer of a product, process or service technology. There must be private sector support from a company with operations in California, and the work must be performed primarily in California. A written agreement or statement of intent must be supplied by each project participant, all fund must be identified, and State funding must not supplant other funding.

Procedures

- o Application. — By response to annual solicitation by the Office of Competitive Technology.

- o **Evaluation.** — Peer and staff review, stressing scientific and technological feasibility, likelihood of commercialization, benefit to the State's economy, cost effectiveness, cost sharing, importance of the grant, focus on technology transfer, and the involvement of small, minority-owned and women-owned businesses in the project.

Terms and Conditions

See eligibility, above.

Other Forms of Assistance

None at this time.

COLORADO

Colorado has no State-sponsored seed capital fund, but it does support and encourage pre-market innovation through other means. Its primary tool is the use of matching grants for university-industry consortia. A total of \$8.9 million has been appropriated for such grants during FY85-90, including \$2.5 million in FY90. These funds have been matched with cash on a six-to-one basis. Current priorities are for work in biotechnology, information technology, advanced materials processing and fabrication, and manufacturing.

This program is administered by, and additional information is available from:

Mr. Rhett D. Speer
Executive Director
Colorado Advanced Technology Institute
1625 Broadway, Suite 700
Denver, Colorado 80202
(303) 620-4777

CONNECTICUT

1. CONNECTICUT PRODUCT DEVELOPMENT CORPORATION

Contact

Connecticut Product Development Corporation
78 Oak Street
Hartford, CT 06106
(203) 566-2920

Overview

CPDC, created in 1972, is one of the oldest publicly supported investment agencies in the United States. CPDC promotes the creation and retention of manufacturing jobs and the diversification of the State's industry by investing in product development by small to medium size companies.

Funding Mechanism

Royalty sharing -- CPDC makes risk capital investment in new and innovative products in the expectation of recovering the investment through royalties on the sale of the product and its derivatives. The investment is neither a grant nor a loan; CPDC takes no equity position in client companies, nor does its investment appear on a company's balance sheet. Once approved, CPDC will provide up to 60 percent of the development costs, as they are incurred, from conception to market-ready stage. In return, CPDC typically receives a 5-percent royalty on sales of the product until a multiple of the original investment has been repaid. Average investment grew from \$90,000 per project in FY80 to almost \$300,000 in FY85.

Budget

\$3 million (FY 87-88), from a State bond issue; royalty investments \$2.8 million (FY86-88). CPDC's aggregate commitment to development projects now stands at \$21.7 million.

Investment Strategy

CPDC expects the return on investment to be significant in one-third of the cases; to break even in another one-third; and to fail to return the full investment in the balance. Original estimates indicated that CPDC would become self-sustaining after 10 years on a total investment of \$10 million in State funds. As of 1986, investment in 71 projects had already resulted in 22 actively marketed products with over \$40 million in sales, the creation of 950 jobs, and \$2.2 million in royalty payments to CPDC. Current estimates indicate that CPDC will reach break-even between 1991 and 1993, even at a higher level of State funding,

and will return between 20 and 25 percent on public investment at maturity.

Technology Focus

CPDC-sponsored products range from soup concentrates to telecommunications equipment. The emphasis on "high technology," but CPDC will consider any product or process that is new and innovative, with an adequate potential market, and potential for job creation.

Eligibility

Although companies of any size are eligible, most clients are in the small-to-medium range. Location within Connecticut is required.

Procedures

- o **Application.** — Inquiries should be made to the CPDC office. Corporation staff will discuss each proposed project with the company and provide an application if appropriate. The staff is also available to provide help in developing a business plan.
- o **Evaluation.** — Review and commitment process takes approximately 3 months from receipt of business plan. Funding criteria include technical feasibility, a verifiable market analysis, proven management talent, and the number of jobs created (minimum requirement is one job per \$10,000 invested, over a 5-year period.)

Terms and Conditions

CPDC maintains a close working relationship with client companies, through frequent telephone calls and site visits, for the life cycle of a sponsored project.

Other Forms of Assistance

In addition to product investments and working capital loans (below), CPDC provides limited assistance to Connecticut companies in the area of financial planning and aids them in contacting other sources of financial assistance and business counseling. These other sources include the Connecticut Department of Economic Development (below), Connecticut Development Authority, U.S. Small Business Administration, and various business and investment groups throughout the State. The State's public employee pension funds have also been allowed to invest \$10 million, or about 5 percent of their assets, in "venture investments" of all kinds.

2. CONNECTICUT INNOVATION DEVELOPMENT LOAN FUND

Contact

Connecticut Product Development Corporation
78 Oak Street
Hartford, CT 06106
(203) 566-2920

Overview

CID, established by CPDC in 1981 with the help of a \$1-million grant from the Economic Development Administration of the U.S. Department of Commerce, is a revolving loan fund that provides low-interest working capital loans to companies with innovative products, processes or services that are ready for marketing and sale.

Funding Mechanism

Low-interest secured loans. CID provides working capital in amounts up to \$300,000, which must be matched on a dollar-for-dollar basis by funds from the private sector.

Budget

\$500,000 (FY88) additional capitalization from State bonds; original capitalization was \$4.5 million, of which \$1 million came from EDA. As of March 1986, CID had made 20 loans totaling just under \$3 million, and \$1.7 million remained available for new loans.

Investment Strategy

Revolving loan fund.

Technology Focus

As with CPDC, products need not be high tech but should be innovative.

Eligibility

Funds can be used for the expenses of tooling, inventory buildup, and market introduction of innovative products. CID loans may follow a CPDC risk capital investment, or they may be free-standing. Location in Connecticut is required.

Procedures

- o Application. — Same as for CPDC development investments.
- o Evaluation. — Not available.

Terms and Conditions

See Funding Mechanism, above.

Other Forms of Assistance

None.

3. CONNECTICUT SEED VENTURES FUND

Contact

Connecticut Seed Ventures L.P.
30 Tower Lane
Avon Park South
Avon, Connecticut 06001
(203) 677-0183

Overview

Connecticut Seed Ventures (CSV) is a privately operated, see level venture fund for high-potential, technology-based start-up companies. CSV, established in 1987, can also assist qualified entrepreneurs in refining their business plans, completing their management teams and helping to attract additional investors.

Funding Mechanism

State general fund and private investors.

Budget

\$5 million (FY88) from general funds, as State's share of initial capitalization totalling \$11 million. Other investors include Yale University and various private corporations.

Investment Strategy

The partnership will make equity investments in the \$50,000-to-\$500,000 range, usually by purchasing convertible preferred stock or convertible debt securities. CSV prefers to be an active investor, often participating as director of an investee company.

Technology Focus

Not available.

Eligibility

Location in Connecticut is a requirement. See Overview, above.

Procedures

- o **Application.** — Initial contact with CSV does not require a complete business plan; any document that efficiently communicates who the people are, what they want to do, and why, will be sufficient.
- o **Evaluation.** — Investment criteria include an evaluation of the experience and qualifications of the entrepreneurs to accomplish their state mission. Other important considerations include a readily identifiable market, uniqueness, total capital requirements, and overall quality of the project.

Terms and Conditions

Not available.

Other Forms of Assistance

Not available.

4. CONNECTICUT SBIR ASSISTANCE GRANT PROGRAM

Contact

Ms. Betsy Hunt
Connecticut Technology Assistance Center
Department of Economic Development
210 Washington Street
Hartford, CT 06106
(203) 566-4587

Overview

Established in 1987 to assist Connecticut companies with commercially feasible research projects.

Funding Mechanism

Grants — bridge financing for companies that have received Federal SBIR Phase I awards and have applied for Phase II grants.

Budget

\$650,000 (FY88) from general funds.

Investment Strategy

Not available.

Technology Focus

Not available.

Eligibility

Applicants must be located or conduct research in Connecticut and employ less than 250 workers.

Procedures

- o Application. — Not available.
- o Evaluation. — Not available.

Terms and Conditions

Not available.

Other Forms of Assistance

The program encourages Connecticut companies to participate in the Federal SBIR Program and promotes industry-university collaboration in developing innovative projects.

DELAWARE

Delaware has no State-sponsored seed capital fund, but it does have a general-purpose program to foster the development of new advanced technology ventures. These efforts focus on the development and use of a new research park in Newark, near the University of Delaware. State officials have consciously avoided pigeonholing their funds and have reserved considerable flexibility in the specific uses of funds to compensate for the State's small size. Delaware is primarily but not exclusively interested in capitalizing on and complementing its existing industry and university resources, including leadership in the development and application of advanced materials and its significant port facilities. For further information, contact:

Dr. Al Restaino
Executive Director
Governor's High Technology Task Force
Delaware Development Office
Carvel Office Building
820 French Street
Wilmington, Delaware 19801
(302) 571-3202

FLORIDA

Florida's High Technology Innovation Research and Development Fund, later renamed the Florida Seed Capital Fund, was established in 1985. It received an appropriation of \$1.5 million, with which to provide up to \$50,000 in seed capital each to small high technology companies. By July 1988, it had made eight awards, at which time the Legislature put the program on "hold" pending reevaluation of Florida's overall strategy and plans for technology transfer and seed capital formation and investment. The Florida Department of Commerce is leading this reevaluation, and is scheduled to report its recommendations to the Legislature by March 1990.

Further information on that study and Florida's plans may be obtained from:

Ms. Mary Helen Blakeslee
Executive Director, Florida Seed Capital Fund
and Chief, Bureau of Business Assistance
Florida Department of Commerce
107 West Gaines Street
Tallahassee, Florida 32399-2000
(904) 488-9357

GEORGIA

1. ADVANCED TECHNOLOGY DEVELOPMENT CENTER

Contact

Richard T. Meyer, Ph.D.
Director
Advanced Technology Development Center
Georgia Institute of Technology
430 10th Street, N.W., Suite N-116
Atlanta, Georgia 30318
(404) 894-3575

Overview

ATDC was created in 1980 to strengthen Georgia's high-technology industry by assisting startups and helping to attract existing enterprises into the State. ATDC is headquartered on the Georgia Tech campus in the Technology Business Center, a \$6.1-million, 83,000-square-foot facility combining office, laboratory and industrial space. ATDC also operates two branch facilities: the Health Science Technology Center, which opened in July 1987 at the Medical College of Georgia in Augusta; and the Middle Georgia Technology Development Center, which opened in September 1988 in Warner Robins to work with defense and aerospace firms. Over 80 percent of ATDC's startup companies are still in business, representing 944 jobs and over \$97 million in annual sales, and contributing over \$12 million to the State's tax base in 1988.

Funding Mechanism

Funding for ATDC comes from a line item in the budget of the University system and from rental of space to companies in the Technology Business Center.

Budget

\$1.79 million (FY87-88).

Investment Strategy

ATDC does not invest directly in commercial firms, but it has established several formal funding programs, including a private investors network, a private for-profit venture capital firm, an annual venture capital conference, and an early-stage "seed" investment fund.

Technology Focus

Special consideration is given to companies developing new technologies in telecommunications, computer hardware, software

development, biotechnology, microelectronics, aerospace, and instrumentation.

Eligibility

Early-stage companies are selected for ATDC membership based on their application of new technology in products, processes or services; quality of the management team; product marketability; ability to gain financing; and growth potential.

Procedures

- o **Application.** — A formal application, along with a detailed written business plan, is required.
- o **Evaluation.** — Application and business plan are subjected to staff review preceding formal presentation by the applicant to a review committee. The recommendation of staff and review committee members is forwarded to the director for final determination of selection.

Terms and Conditions

Membership in ATDC is based on acceptance and agreement by the applicant to terms of a memorandum of understanding, which may include performance measures to be met in order to maintain membership.

Other Forms of Assistance

ATDC also provides assistance in obtaining Federal SBIR grants through seminars and help in preparing proposals.

2. GEORGIA SEED CAPITAL FUND

Contact

Mr. C. Michael Cassidy
Manager, Statewide Development Programs
Advanced Technology Development Center
Georgia Institute of Technology
430 Tenth Street, Northeast, Suite N-116
Atlanta, Georgia 30318
(404) 894-3575

Overview

In 1989, the Legislature authorized the creation of a public-private, early-stage "seed capital" fund. The Georgia Seed Capital Fund will combine public and private investments, but will be privately managed.

Funding Mechanism

The State will match private contributions on a one-to-three basis — that is, 75 percent of the Fund will be private investment and 25 percent will come from the general fund.

Budget

Not yet funded at this time. Initial appropriations will be sought during FY 1990.

Technology Focus

Agriculture, manufacturing and technology products.

Eligibility

Georgia businesses.

Procedures

- o Application. — Not available.
- o Evaluation. — Not available.

Terms and Conditions

Not available.

3. GEORGIA CAPITAL NETWORK

Contact

Ms. Alcina de Figueiredo
Entrepreneurial Services
Advanced Technology Development Center
Georgia Institute of Technology
430 10th Street, N.W., Suite N-116
Atlanta, Georgia 30318
(404) 894-3575

Overview

Formerly the Venture Capital Network of Georgia, GCN is modeled on William Wetzel's Venture Capital Network, Inc. (VCN), at the University of New Hampshire (see Appendix A).

HAWAII

1. HAWAII INNOVATION LOAN PROGRAM

Contact

Mr. Tom Smyth
Business Services Division
Department of Business and Economic Development
P.O. Box 2359
Honolulu, Hawaii 96804
(808) 548-4608

Overview

Provides loans to help new and existing businesses develop prototypes or bring new or improved products to market.

Funding Mechanism

Revolving loan fund -- provides loans of up to \$100,000 with flexible repayment terms, including warrants, royalties and license fees.

Budget

\$660,000 (FY88).

Investment Strategy

Not available.

Technology Focus

Technologies supported by Hawaii's other technology development programs include the following:

- o alternative energy (geothermal, ocean thermal, solar);
- o aquaculture;
- o biotechnology;
- o electronics design and assembly;
- o optical systems and machine vision;
- o software development;
- o space exploration and development;
- o telecommunications; and
- o tropical agriculture.

Eligibility

Loans may be used for inventions and innovations, including prototype development and preparation of business plans, and for start-up costs, including equipment, machinery, materials, and working capital..

Procedures

- o **Application.** — Available from the contact listed above.
- o **Evaluation.** — Performed by staff with assistance from a technical advisory committee where needed.

Terms and Conditions

Applicant must be unable to obtain conventional funding; may not infringe on the rights of others; and must demonstrate ability to repay loan. Interest at 7.5 percent simple annual rate. Payments of principal and interest may be deferred for up to 2 years.

2. HAWAII STRATEGIC FUND

The Hawaii Legislature authorized this Fund in 1989 and appropriated \$6 million to launch it, effective July 1, 1989. Definitive information, beyond the fact that it provides for seed and venture capital investments, will be available after the Fund begins operation.

IDAHO

Idaho has no State-sponsored seed capital fund.

ILLINOIS

1. BUSINESS INNOVATION FUND

Contact

Manager
Business Innovation Fund
Department of Commerce and Community Affairs
State of Illinois Center, Suite 3-400
100 West Randolph
Chicago, Illinois 60601
(312) 917-2387

Overview

BIF provides grants to small Illinois businesses to fund research and consultation arrangements with universities and other not-for-profit research institutions in Illinois. The Fund is designed to stimulate the development, marketing and commercialization of new, technology-based products or services that have a significant potential for job creation or retention.

Funding Mechanism

Royalty sharing -- BIF provides up to 50 percent of project costs for developing a new product or service, not to exceed \$100,000. The applicant is expected to provide at least half of the project costs from other sources. Total project costs include all new outlays or investments for commercializing the product or service, including: amortizable R&D expenses (such as patents and prototype development); capital investments (such as equipment to manufacture the product); and working capital (such as materials, labor and marketing).

Fund recoups its investment through royalties on sales or licenses once the product or service is produced and marketed. The royalty rate is negotiable but is typically 5 percent of sales. The royalty continues until a multiple of the principal amount has been repaid, the multiple representing the time value of the money invested and the risk of the project. For example, an investment paid back in 10 years might require a multiple of four times the original amount. However, the payback schedule for each project is negotiated on an individual basis.

Budget

\$400,000 (FY88) from general revenue funds, out of a total of \$3.6 million appropriated for high technology.

Investment Strategy

Repaid funds are used for new investments in other technology-based ventures. The Fund is not intended to compete with venture capital firms, commercial lending institutions or other sources of funds.

Technology Focus

The Fund will accept applications from companies in a number of advanced technology fields, including the following:

- | | |
|---------------------------------|---------------------------------|
| o construction machinery; | o plastics; |
| o composite materials; | o research laboratories; |
| o drugs and medical products; | o repair service; |
| o electronic computing devices; | o software; |
| o electronic components; | o telecommunications equipment; |
| o food and forestry products; | o transportation equipment; and |
| o printing and publishing; | o wholesale trade. |

Eligibility

Assistance is available to technology-based start-ups and existing businesses domiciled in Illinois, with a focus on small businesses (less than 500 employees). Eligible small businesses include sole proprietorships, partnerships, corporations, associations, joint ventures, or cooperatives. The typical applicant is described as "economically and technically viable . . . with a product or service capable of being commercialized and creating significant employment."

Assistance provided by the Fund is intended to bridge the gap between university resources and business needs; funds must be used in part for cooperation with universities or other not-for-profit research entities in the State. Where applicant can show a substantial ongoing relationship with such an entity, the majority of their award can be spent on working capital or capital investments. Where there is no past relationship, a majority of the Fund proceeds should be used to expand on university or research lab services.

Procedures

- o **Application.** -- Applications are accepted throughout the year, subject to available funds, and will be acknowledged promptly. Applicants are encouraged to discuss project ideas with Department prior to submitting final proposal, to ensure that project is appropriate and eliminate need for complete application if proposal is more appropriate for other public or private capital sources. Application package must contain five copies of project proposal or business plan, 30 pages or less in length, with prescribed information. Contents other than title page will be treated as confidential. No fees are charged.

- o Evaluation. -- Proposals will be evaluated based on their technical, market and financial feasibility. Applicant may be required to undergo a technical feasibility analysis, at his own expense. Typical turnaround time is less than four weeks (longer if a technical evaluation is required).

Terms and Conditions

Applicant is also expected to demonstrate that proposed product or service has competitive edge over similar products or services, as well as potential market and repeat customers. Applicant must have sufficient working capital to operate on a sound financial basis, and projections of earnings on new product sufficient to repay BIF. Department will sign investment contract with recipients and will require an annual audit of expenditures.

Other Forms of Assistance

The Technology Commercialization Program also provides grants for R&D; details not available.

2. EQUITY INVESTMENT FUND

Contact

Manager
Equity Investment Fund
Department of Commerce and Community Affairs
State of Illinois Center, Suite 3-400
100 West Randolph
Chicago, Illinois 60601
(312) 917-2387

Overview

EIF is designed to stimulate the development and expansion of technology-based companies by providing equity financing to companies that have a significant potential for job creation.

Funding Mechanism

Equity purchase -- the Fund provides working capital through the purchase of company stock. EIF will provide up to one-third of the anticipated cost of any given project, but not more than \$250,000 to any one company. Each applicant is expected to provide at least two-thirds of total project costs from other sources. Only new outlays or investments will be considered for purposes of matching requirements.

Budget

\$2 million (FY88) from the Build Illinois appropriation.

Investment Strategy

The Department of Commerce and Community Affairs will make available a total of up to \$9 million each year for EIF and traditional small business loans. EIF is managed like a revolving loan fund, its investment being recouped when the company buys back its stock at some future date (unspecified).

Technology Focus

The Fund will accept applications from companies in a number of advanced technology fields, including the following:

- o construction machinery;
- o composite materials;
- o drugs and medical products;
- o electronic computing devices;
- o electronic components;
- o food and forestry products;
- o printing and publishing;
- o plastics;
- o research laboratories;
- o repair service;
- o software;
- o telecommunications equipment;
- o transportation equipment; and
- o wholesale trade.

Eligibility

New and existing small businesses (less than 500 employees) located in or to be located in Illinois may apply to the Fund. The typical applicant is described as "an economically and technically viable company with a product or service capable of being commercialized within 24 months." Funds may be used for purchases of land, buildings, equipment, and R&D expenses.

Procedures

- o **Application.** -- Applications will be received on an ongoing basis.
- o **Evaluation.** -- Proposals are evaluated based on the technical, market and financial feasibility of the proposal. The company should show actual markets and potential repeat customers. The applicant should have actual and projected earnings indicating an ability to repay the investment, and sufficient working capital after the proposed investment to operate on a sound financial basis.

Terms and Conditions

EIF, to protect its investments, will sign investment contracts with recipients covering such items as scope of work, schedule for receipt and repayment of funds, and submission of reports and audits.

Other Forms of Assistance

Equity investments by EIF are leveraged with other State, Federal and privates sector funds. In addition, the State's public employee pension funds have been authorized to invest up to \$15.5 million in "venture investments" of all kinds.

3. ILLINOIS VENTURE FUND

Contact

Ms. Joan Fortune
General Partner
Frontenac Venture Company
208 South LaSalle Street, Suite 1900
Chicago, Illinois 60604
(312) 368-0044/0047

Overview

Illinois Venture Fund, a limited partnership, was jointly founded by the State and a private firm, Frontenac Venture Company, in 1984. Funds are used to provide equity capital for start-up and early stage companies working on product or prototype development, testing and production, and initial marketing. Frontenac manages the fund and is responsible for all investment decisions.

Funding Mechanism

Common stocks or securities that convert to common stocks.

Budget

Total capitalization \$12 million, of which \$2 million came from the State (from general funds) and \$10 million came from private sector sources.

Investment Strategy

Long-term and capital gains oriented. Investments are expected to remain in the Fund for 5 to 7 years or longer. Investments range from under \$300,000 to over \$1 million.

Technology Focus

Technologies applicable to specific business needs in large or rapidly growing markets.

Eligibility

Startup and early-stage companies located in Illinois.

Procedures

Inquiries should be sent to the above contact. Initial inquiries should, if possible, include a brief business plan that provides as much of the following information as is available:

- o a description of the product or service, its underlying technology if any, and a discussion of why this opportunity is proprietary or unique;
- o profiles of the management principals involves and a discussion of missing elements, if any, on the management team;
- o a brief analysis of the market and competition;
- o descriptions of marketing, distribution and production plans;
- o financial plans, including amount of capital sought, planned use of proceeds, and financial projections; and
- o historic financial statements, if any.

Terms and Conditions

Funds are normally used for product or final prototype development and related research, testing and production, as well as initial marketing.

4. HEARTLAND VENTURE CAPITAL NETWORK, INC.

Contact

Heartland Venture Capital Network, Inc.
1710 Orrington Avenue, Suite 200
Evanston, Illinois 60201
(312) 864-7970

Overview

Modeled on William Wetzel's Venture Capital Network, Inc. (VCN), at the University of New Hampshire (see Appendix A).

INDIANA

1. CORPORATION FOR SCIENCE AND TECHNOLOGY

Contact

Mr. Stephen Gage
President
Indiana Corporation for Science and Technology
One North Capitol Avenue, Suite 925
Indianapolis, Indiana 46204
(317) 635-3058

Overview

Founded in 1982, CST is a public-private partnership whose mission is to strengthen the State's economy through the development and application of science and technology. Its 25-member board includes representatives business, government and universities who are appointed by the Governor. In addition to the usual array of research grants, technology transfer and management assistance programs, CST provides advice to SBIR applicants and, working closely with CID, invests in start-up and early-stage companies.

Funding Mechanism

Biennial appropriations from State general funds.

Budget

\$10 million per year, from FY83 through FY88, of which only a small portion is used for investments. In FY86, for example, only \$100,000 was committed to the so-called Research and Technology Investment Program.

Investment Strategy

Awards, paid out on a mutually agreed upon schedule, with repayment of twice the award amount within 10 years. Priority is given to those that incorporate both advanced technology and plans for full commercialization. An expedited approval process is available for awards of less than \$100,000.

Technology Focus

Proposals involving application-oriented research in high technology fields that will lead to marketable products or processes. The following fields have been targeted for major support:

- | | |
|-------------------------|---------------------------|
| o advanced materials; | o industrial by-products; |
| o agricultural genetics | o information processing; |
| and technology; | o integrated optics; |

- o artificial intelligence;
 - o biotechnology;
 - o control systems;
 - o energy development;
 - o manufacturing technology;
 - o medical technology;
 - o microelectronics; and
 - o telecommunications.
- Other fields will be evaluated on their merits and potential contribution.

Eligibility

Organizations -- public or private, of any size, corporate or unitary; entrepreneurs as individuals; or any combination.

Procedures

- o **Application.** -- In the format specified by ICST, to meet quarterly deadlines of January 1, April 1, July 1, and October 1. Advance discussion with ICST staff is strongly recommended.
- o **Evaluation.** -- All proposals are evaluated on their merits and their potential contribution to Indiana's economy. Proposals are reviewed following guidelines published by ICST, including appropriateness to its mission and objectives, completeness of information, technical design, and business plan.

Terms and Conditions

Relevance to Indiana, realistic benchmarks for monitoring, and payback within 10 years are called for.

Other Forms of Assistance

Technical assistance is available for developing working concepts or helping to find alternative funding sources.

IOWA

1. IOWA VENTURE CAPITAL FUND

Contact

Not available.

Overview

IVCF is a private, for-profit limited partnership whose capitalization is encouraged by State tax credits. It has been essentially replaced by the newly created Iowa Business Development Finance Corporation, described below.

Funding Mechanism

Tax credit — private investors receive a 5-percent State income tax credit on all initial investments. (Iowa also offers a 6.5-percent corporate tax credit on qualifying R&D expenditures.)

Budget

Initial capitalization \$15 million, in 1983, was raised through sale of securities to the public by the State. The Fund was fully invested as of April 1989.

Investment Strategy

IVCF provided between \$50,000 and \$100,000 in venture capital financing to start-up companies. It has often co-ventured with the Iowa Product Development Corporation (see below).

Technology Focus

Not available.

Eligibility

Not available.

Procedures

- o Application. — Not open to additional investments as of April 1989.
- o Evaluation. — Not available.

Terms and Conditions

Not available.

Other Forms of Assistance

Iowa has also committed some \$6.3 million from its public pension funds to venture investments, out of total pension fund assets of \$4.2 billion.

2. IOWA PRODUCT DEVELOPMENT CORPORATION

Contact

Iowa Product Development Corporation
200 East Grand Avenue
Des Moines, Iowa 50309
(515) 281-5292

Overview

IPDC, founded in 1983, provides seed capital to new and existing Iowa companies that are bringing new products, processes or technologies into the marketplace.

Funding Mechanism

Iowa plan-lottery appropriation.

Budget

\$1.5 million (FY87-88); \$1.25 million (FY88-89); \$1.5 million (FY89-90).

Investment Strategy

As of April 1989, IPDC has made 37 investments in new and existing Iowa businesses, primarily for the introduction of new product innovations. Its focus has been on very early stage, seed capital participation, with investment typically recaptured through royalties on subsequent sales of that product, up to a predetermined multiple of the original principal. Projects have been funded in the range of \$75,000 to \$300,000. IPDC frequently cosponsors ventures with IVCF (above).

Technology Focus

Not specific, although special priorities favor electronics, instrumentation and devices to aid disabled persons.

Eligibility

Any Iowa person or firm.

Procedures

- o Application. — Forms available at Corporation office.

- o **Evaluation.** — Coordinated by IPDC staff and Board of Directors.

Terms and Conditions

Not specified.

Other Forms of Assistance

Market research, management recruitment and investor solicitation.

3. IOWA BUSINESS DEVELOPMENT FINANCE CORPORATION

Contact

Mr. Jude Conway
Administrator
Division of Business Financial Assistance
Iowa Department of Economic Development
200 East Grand Avenue
Des Moines, Iowa 50309
(515) 281-3704

Overview

IBDFC is a private, State-chartered corporation.

Funding Mechanism

IBDFC is capitalized through a combination of (1) appropriations from the State general fund and (2) the sale of securities to Iowa financial institutions, insurance companies, utilities, and others.

Budget

Initial capitalization is \$4.65 million from State appropriations in 1988-89, plus approximately \$9.0 million raised through sale of securities.

Investment Strategy

IBDFC is a general business finance program, with a special focus on subordinated debt and on equity participation in later-stage venture capital investments. Projects are expected to range from \$100,000 to \$1 million. IBDFC is expected to co-venture with conventional bank lending and other sources.

Technology Focus

None specified.

Eligibility

Any existing Iowa business.

Procedures

- o **Application.** — Applicants must be sponsored by a member financial institution.
- o **Evaluation.** — Conducted by investment manager under contract to IBDFC.

Terms and Conditions

Senior or subordinated debt, typically with warrants or convertibility to preferred or common stock.

Other Forms of Assistance

IBDFC projects seek maximum participation by conventional lenders and by other programs of State and local governments.

4. IOWA VENTURE CAPITAL NETWORK

Contact

Iowa Venture Capital Network
2700 College Road
Box 4-C
Council Bluffs, Iowa 51502
(712) 325-3437

Overview

Modeled on William Wetzel's Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A).

KANSAS

1. AD ASTRA FUND L.P.

Contact

Dr. William G. Brundage, President
Mr. Kevin M. Carr, Vice President
Kansas Technology Enterprise Corporation
112 W. 6th Street, Suite 400
Topeka, Kansas 66603
(913) 296-5272

Overview

The Ad Astra Fund L.P., announced in November 1988, was established to provide early-stage seed capital for high-risk start-ups. The general partner is Technology Partners L.P., a joint venture of Campbell-Becker, Inc., a Lawrence venture capital firm, and KTEC Holdings, Inc. KTEC Holdings is a subsidiary of the Kansas Technology Enterprise Corp., a nonprofit public instrumentality created by the Kansas Legislature in 1987 to replace the Kansas Advanced Technology Commission. KTEC administers all of the State's technology and innovation projects, with the goal of creating employment and promoting the growth of high technology companies. It is authorized to provide financing for the development, refinement and commercialization of products, processes or innovations, whether by start-ups or existing small firms.

Funding Mechanism

Gaming revenues and private investors. The Economic Development Initiative Fund (EDIF), also created in 1987, receives 30 percent of the proceeds of the State lottery. EDIF in turn invests in a variety of economic development programs, including KTEC and the Ad Astra Fund. However, KTEC's 1988 Annual Report recommended that, to ensure long-term stability, future funding should come from State general funds rather than "unpredictable allocations" from EDIF.

Budget

Total capitalization of between \$5 million and \$15 million. Initial KTEC investment \$560,000 in FY88, with another \$1 million to be invested when received from EDIF; total State investment \$1.56 million, all from gaming revenues. Ad Astra Fund also seeks up to \$10 million in private investments.

Investment Strategy

The general partners have announced that they will seek capital and contacts on a national basis, and will make investments

in Kansas and the Midwest. The Fund will start making investments prior to the time it is fully capitalized, using State funds; as more limited partners are admitted, more money will become available for additional financings. The Fund will purchase qualified securities, make loans, and enter leaseholds and other contractual arrangements.

Technology Focus

The Fund will provide seed capital for companies that are developing new products or processes for commercialization, many of them as an outgrowth of research at Kansas universities. Priority for most KTEC programs is placed on projects or investments that will enhance employment opportunities in these areas:

- o agricultural and industrial processes;
- o aviation and aerospace;
- o biotechnology and related biotechnical processes;
- o computers and software;
- o engineering;
- o natural resources;
- o plastics and advanced materials; and
- o telecommunications.

Eligibility

Funds can be used for, but are not limited to, business plans, prototype testing and refinement, field testing, and initial market assessment and development. To be considered for a seed capital investment, a firm must demonstrate that (1) the innovation will provide a competitive edge in the marketplace; (2) significant employment will be generated in Kansas; and (3) sufficient capital is unavailable through traditional financing sources.

Procedures

- o Application. — Not available.
- o Evaluation. — Not available.

Terms and Conditions

Not available.

Other Forms of Assistance

KTEC administers two additional grant programs available to technology-based start-up companies:

- o the Applied Research Matching Grants Fund, which provides up to 40 percent of the cost of academic/industry projects with commercial and employment potential (budget \$0.8 million FY88, \$1.25 million FY89); and
- o the SBIR Matching Grants Program, which helps companies apply for Phase I and provides bridge financing for those expecting Phase II funding (budget \$230,000 FY88).

KTEC also supports the Kansas Technology Resource Data Base, at Kansas State University, a PC-based inventory of R&D resources in the public and private sectors. Finally, KTEC has cosponsored three annual Midwest Venture Capital Conferences; cosponsors included Arthur Young, Kansas Department of Commerce and SBA.

2. KANSAS VENTURE CAPITAL, INC.

Contact

Mr. Rex Wiggins
President
Kansas Venture Capital, Inc.
Lenexa, Kansas
(913) 262-7117

Overview

KVC is the SBIC subsidiary of the publicly chartered Kansas Development Credit Corporation, created in 1977 to engage in financial activities that support economic development within Kansas. KDCC and KVC are privately capitalized and operated.

Funding Mechanism

\$10 million, one-time investment by the State, plus private contributions from KDCC and Kansas banks. KVC hopes to match the State funds with private investments.

Budget

Current capitalization \$11.5 million, including \$1.5 million in private dollars; target is \$20 million.

Investment Strategy

The fund will invest an average of between \$300,000 and \$500,000 per deal. Recipients must be private companies in Kansas.

Technology Focus

Not available.

Eligibility

KVC extends direct loans to small businesses for narrowly defined purposes, usually working capital but occasionally inventory, equipment and real property.

Procedures

- o Application. — Not available.

o Evaluation. — Not available.

Terms and Conditions

Not available.

Other Forms of Assistance

KDCC, together with the Kansas Public Employee Retirement System, pioneered the purchase of the guaranteed portion of SBA loans in 1972. As of 1987, they had \$0.3 million in outstanding loans and \$19.7 in additional commitments. However, none of the \$3.3 billion in pension assets had been committed to venture investments.

KENTUCKY

1. COMMONWEALTH VENTURE FUND

Contact

Commonwealth Venture Fund
Kentucky Economic Development Cabinet
2400 Capitol Plaza Tower
Frankfort, Kentucky 40601
(502) 564-7670

Overview

The Commonwealth Venture Fund was created to provide startup and early-stage financing of Kentucky-based small businesses which offer potential for long-term capital appreciation. The Fund was created pursuant to the Commonwealth Venture Fund Act of 1988, enacted by the Kentucky General Assembly, and is expected to be operational by the Spring of 1990. The purpose of the Fund is to:

- o encourage capital investment in Kentucky;
- o encourage the establishment or expansion of small businesses and industry in Kentucky;
- o provide additional jobs and encourage the development of new products and technology in Kentucky through seed and venture capital investments; and
- o supplement, as much as possible, investments made by the Fund with additional capital investments from other sources into Kentucky businesses with rapid growth potential.

It is expected that the companies and projects receiving assistance from the Fund will improve the quality of life and attract new economic development into Kentucky communities.

Funding Mechanism

A State income tax credit equal to 40 percent of the purchase price of an interest in the Fund. The credit applies to Kentucky's general income tax, corporation license tax, bank and trust company share tax, and savings and loan tax. The tax credit is effective for tax years beginning after December 31, 1989, and expires effective December 31, 1993.

Budget

Officials expect that this tax credit will leverage a fund with total capitalization approaching \$17.5 million.

Investment Strategy

The Fund may make investments of up to \$500,000 or 50 percent of equity in non-manufacturing firms, and up to \$1.5 million in manufacturing firms.

Technology Focus

None specified.

Eligibility

Kentucky-based small businesses employing less than 100 persons and with equity capitalization of less than \$500,000 for non-manufacturing firms.

Procedures

The Fund is governed by a panel composed of nine members responsible for selecting a managing firm for investments and establishing criteria and guidelines for the management of the Fund. The law requires that the Fund make investments in Kentucky's eligible small businesses in a timely manner.

Terms and Conditions

Businesses seeking capital from the Fund are strongly encouraged to leverage the Fund's investment with additional capital from other sources.

LOUISIANA

1. LOUISIANA SMALL BUSINESS EQUITY CORPORATION

Contact

Mr. Mike Williams
Louisiana Economic Development Corporation
P.O. Box 94185
Baton Rouge, Louisiana 70804-9185
(504) 342-5674

Overview

This program leverages loans to qualified small businesses in Louisiana on a participation or guarantee basis with commercial lending institutions and licensees. The program also contains a component that will fund feasibility studies.

2. LOUISIANA VENTURE CAPITAL INCENTIVE PROGRAMS

Contact

Mr. Gary Neal
Executive Director
Louisiana Economic Development Corporation
P.O. Box 94185
Baton Rouge, Louisiana 70804-9185
(504) 342-5674

Overview

These LEDC programs function to stimulate the availability of venture capital and to encourage the formation of seed and venture capital funds in Louisiana through three subprograms (see below).

Technology Focus

Semiconductors and biotechnology. The State wants to take advantage of opportunities arising from the recent \$25-million Federal research grant awarded to the Center for Advanced Microstructure and Devices for the development of a Compact Electron Storage Ring. This machine will be used to produce semiconductor chips 1000 times smaller than those available today, and there is optimism that this project will spawn microelectronics companies in Louisiana. The State is also moving forward in biotechnology: the Pennington Biomedical Research Center opened in 1989 after receiving State and Federal grants totaling \$17 million.

A. LOUISIANA VENTURE CAPITAL CO-INVESTMENT PROGRAM

LEDC may co-invest up to 25 percent (maximum \$500,000) in new venture funds for investments in Louisiana businesses. Eligible venture capital firms must have at least \$7.5 million under management and at least 5 years experience in venture activities.

B. LOUISIANA VENTURE CAPITAL MATCH PROGRAM

LEDC may invest one dollar for every two dollars raised privately by venture funds for investments in Louisiana small businesses, not to exceed \$2.5 million. Eligible venture capital funds must be located in Louisiana, have at least \$5 million under management, and be run by experienced venture capital fund managers.

C. LOUISIANA MINORITY VENTURE CAPITAL MATCH PROGRAM

LEDC may also invest on a 1-for-2 matching basis in investment in minority small businesses, not to exceed \$2.5 million. Eligible minority venture capital funds need have only \$250,000 under management, but must be located in Louisiana and be run by experienced managers.

MAINE

1. MAINE CAPITAL CORPORATION

Contact

Mr. David Coit
Maine Capital Corporation
70 Center Street
Portland, Maine 04101
(207) 772-1001

Overview

Privately funded and managed, for-profit SBIC established in 1980. The State government provided a 50-percent, one-time-only tax credit for private investors in MCC.

Funding Mechanism

Equity only, but it can take the form of subordinated notes with warrants, convertible debentures, preferred or common stocks, or some combination of these. Initial investments range from \$100,000 to \$150,000.

Budget

Total capitalization \$1.0 million.

Investment Strategy

Tailored to serve the interests of both the client and MCC. Seeks to build significant enterprises within Maine.

Technology Focus

No particular technology is favored.

Eligibility

Must operate or plan to operate in Maine.

Procedures

- o Application. — Open solicitation. Guidelines available from above contact.
- o Evaluation. — By MCC, based on business plan.

Terms and Conditions

Requires a close working relationship between company management and MCC staff.

MARYLAND

1. OFFICE OF TECHNOLOGY DEVELOPMENT

Maryland has recently established an Office of Technology Development, which will include a seed capital program. Formal guidelines have yet to be developed for this "challenge grant" program. For further information, contact:

Mr. Selig Solomon
Director, Office of Technology Development
Department of Economic and Employment Development
217 East Redwood Street
Baltimore, Maryland 21202
(301) 333-6990

2. MID-ATLANTIC VENTURE CAPITAL NETWORK

Contact

Ms. Marnie Bloom
Michael D. Dingman Center for Entrepreneurship
College of Business and Management
University of Maryland
College Park, Maryland 20742-7215
(301) 454-8080

Overview

Modeled on William Wetzel's Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A).

MASSACHUSETTS

1. MASSACHUSETTS TECHNOLOGY DEVELOPMENT CORPORATION

Contact

Mr. Robert J. Crowley
Vice President
Massachusetts Technology Development Corporation
84 State Street, Suite 500
Boston, Massachusetts 02109
(617) 723-4929

Overview

An independent, quasi-public corporation established in 1978 to address the then-existing "capital gap" for early-stage and expanding technology-based companies. As the venture capital industry boomed in the early 1980s, MTDC concentrated more of its investments on start-up companies and, more recently, on small existing companies that want to expand.

Funding Mechanism

MTDC's original investment funds came from a 1979 grant of \$2 million from the Economic Development Administration, U.S. Department of Commerce. In 1981 it received an additional grant of \$1 million from the Corporations for Innovation Development Program, U.S. Department of Commerce. In addition, the Commonwealth of Massachusetts has over the years appropriated at least \$4.5 million to augment MTDC's investment fund.

At the end of FY87, MTDC had invested a total of \$9.9 million in 35 active companies, leveraging \$44.5 million in private funds in the initial round and another \$139.5 million in private funds during subsequent rounds of financing.

Budget

\$748,000 FY88, from State general funds, of which \$148,000 is an appropriation for operations and \$600,000 is a grant to increase the investment fund.

Investment Strategy

Provides direct financial assistance through debt or equity investments, in the form of long-term unsecured notes, or the purchase of common stock, or some combination of the two. MTDC insists on at least partial co-venturing by private sources, and over the years it has leveraged over five dollars of private investment for every dollar of MTDC funds. Co-venturers include venture capital firms, banks, SBICs, insurance companies, limited

partnerships, informal investor networks, and individual and corporate investors.

Technology Focus

MTDC's portfolio of investments changes every year, but it generally emphasizes the following advanced technology sectors:

- o computer software, services;
- o computer equipment, peripherals;
- o factory automation equipment and systems;
- o fiber optics;
- o medical instruments; and
- o telecommunications;

Eligibility

Applications are invited not only from principals but also from members of the venture capital, banking, legal, auditing, and academic professions who know of investment opportunities. However, MTDC will invest only in companies that have the following characteristics:

- o located in, or willing to locate in, Massachusetts;
- o technology-based, and with products sufficiently innovative to provide a competitive advantage;
- o capable through expansion of producing a significant increase in employment; and
- o able to demonstrate that it has been unable to secure sufficient capital from conventional sources, on affordable terms, to finance its expansion.

Procedures

- o **Application.** — The only required form of application is the submission of a comprehensive business plan.
- o **Evaluation.** — The review process can often be completed in eight weeks. It consists of the following steps:
 - * initial review by professional staff;
 - * in-depth analysis by professional staff;
 - * review by the Investment Committee of the Board of Directors; and
 - * consideration and vote by the full Board of Directors.In cases where the staff makes in-depth review and concludes not to make an investment of MTDC funds, it will nevertheless make an effort to direct the applicant to other potential sources of funds.

Terms and Conditions

Investments typically range from \$100,000 to \$250,000, up to a maximum of \$500,00. MTDC negotiates with each client a package that is tailored to the firm's needs, the co-venturer's investment, and MTDC's goals.

Other Forms of Assistance

In addition to its Investment Program, described above, MTDC operates a Management Assistance Program that reviews business plans and counsels companies on financing strategies and a Financial Packaging Program that helps companies find private investors without committing MTDC funds.

The Commonwealth of Massachusetts has assisted in the creation of two other programs to provide early stage-grant, equity and debt financing:

- o Massachusetts Capital Resource Company (MCRC), a private, for-profit, 25-year limited partnership created by nine Massachusetts-based insurance companies 1977 with \$60 million in private funding, for which they received tax credits (capitalization has since risen to \$100 million); and
- o Massachusetts Community Development Finance Corporation, a non-profit, independently operated fund begun in 1980 with \$5 million in public funding from the Commonwealth general fund.

Neither of these funds, however, specialize in the commercialization of advanced technology. In the case of MCRC, the focus is on later-stage financing, working capital, turnarounds, and buyouts.

MICHIGAN

1. MICHIGAN STRATEGIC FUND — SEED CAPITAL PROGRAM

Contact

Mr. Jim Cash
Program Manager
Seed Capital Program
Michigan Strategic Fund
P.O. Box 30234
Lansing, Michigan 48909
(517) 373-7551

Overview

The Michigan Strategic Fund, established in 1985, provides funding for a variety of programs to enhance the availability of private capital for entrepreneurs and small and medium size businesses. MSF's Seed Capital Program has helped to establish three privately operated and managed funds that provide early-stage equity investments. The complementary Product Development Program has recently been phased out; it provided later-stage debt capital in exchange for royalties on sales.

Funding Mechanism

The Seed Capital Program has loaned \$2 million to each of three private seed capital funds, on condition that each loan is matched by \$1 million in private funds. The 9-percent, nonrecourse loans are to be repaid on the same schedule as partners distributions, in proportion to degree of participation.

Budget

Total capitalization will be \$10.7 million, including \$6 million in public funds.

Investment Strategy

The private seed capital limited partnerships will be responsible for investment decisions and the day-to-day management of the funds.

Technology Focus

Biotechnology, factory automation, information technology, and advanced materials.

Eligibility

The funds provide equity capital to new firms to finance activities such as the development of working prototypes, business and marketing plans, and the assembling of a management team..

Procedures

- o **Application.** — Entrepreneurs contact the three seed funds directly.
- o **Evaluation.** — By the three seed funds, rather than by government employees.

Terms and Conditions

Typically a straight equity investment.

Other Forms of Assistance

The State Research Fund provides grants of between \$20,000 and \$50,000 to individuals and organizations for R&D projects that have been proven feasible but have not yet reached the prototype stage. Companies working in conjunction with a Michigan college or university must match 25 percent of the grant in cash. This program also provides bridge financing for SBIR Phase I winners who are expecting Phase II awards. Budget \$500,000 per year, as recently as FY89.

MSF's Office of New Enterprise Services (ONES) provides consultant services to entrepreneurs who are attempting to commercialize technology-based products or services, including assessments of technology, markets and management. ONES provides both resource materials and referrals to professional services in accounting, law, marketing, and business management. ONES also reviews business plans and acts as an advocate in finding public and private sources of funding. Budget \$496,000 FY88.

2. STATE RESEARCH FUND

Contact

Mr. Ed Reed
State Research Fund
Michigan Strategic Fund
P.O. Box 30234
Lansing, Michigan 48909
(517) 373-7550

Overview

The Fund provides grants to prove the feasibility of R&D projects and to lead to prototype development. It also provides bridge grants to support successful SBIR Phase I projects that are awaiting Phase II funding from Federal agencies.

Budget

\$500,000 annually.

Investment Strategy

Fund provides small grants (\$20,000 to \$50,000) for proof-of-concept research with commercial potential. Recipients must provide a minimum 25-percent cash match.

Eligibility

Michigan businesses or universities that work in conjunction with businesses.

Procedures

Applicant responds to State solicitation with project description and business plan.

3. MICHIGAN VENTURE CAPITAL DIVISION

Contact

Mr. David C. Turner
Venture Capital Division
Bureau of Investments
Michigan Department of Treasury
Treasury Building
Lansing, Michigan 48922
(517) 373-3150

Overview

MCVD makes venture capital investments in Michigan-based companies with demonstrated potential for rapid growth.

Funding Mechanism

MCVD uses funds from the Michigan State Employees' Retirement System, and it invests both directly (in small businesses) and indirectly (in private venture capital partnerships). The Fund manages its direct investments internally. Funds earmarked for venture investment have also been placed under the responsibility of 29 different venture capital and LBO funds, out of over 300 such funds reviewed by

the State. Preference is given to coventuring with other organized venture capital funds.

Budget

As of 1989, a total of \$600 million in public capital was available for such investments.

Investment Strategy

The Fund's objective is to realize a greater return on its own investments and to develop a network with the private venture capital industry by investing in organized venture capital pools. Typical initial investments are from \$500,000 up, for terms of 5 to 7 years, with a target of returns commensurate with those of the venture capital industry.

Technology Focus

Direct investments have included companies in the following fields:

- | | |
|---|---------------------------------|
| o biological research; | o laser welders; |
| o computer software and peripherals; | o machine vision systems; |
| o high-speed printers for microcomputers; | o medical diagnostic apparatus; |
| o industrial robots and conveyor systems; | o recreational vehicles; |
| | o telecommunications; and |
| | o unique polymers. |

Eligibility

MCVD will consider both high-tech and existing companies, but not real estate or debt-restructuring investments. Applicants should have a unique or proprietary product, service or market position that will give them a competitive edge. Companies seeking funds must currently be located in Michigan or plan to relocate half of their assets or personnel to Michigan.

Procedures

- o **Application.** — Contact the Venture Capital Division.
- o **Evaluation.** — Not available.

4. UPPER PENINSULA VENTURE CAPITAL NETWORK, INC.

Contact

Upper Peninsula Venture Capital Network, Inc.
P.O. Box 7107
Marquette, Michigan 49855
(906) 227-2406

Overview

Modeled on William Wetzel's Venture Capital Network, Inc. (VCN), at the University of New Hampshire (see Appendix A).

MINNESOTA

1. SUPERIOR VENTURES

Contact

Mr. Mitchell Dann
Investment Advisors, Inc.
1100 Dain Tower
527 Marquette Avenue
Minneapolis, Minnesota 55402
(612) 371-7780

Overview

In 1986, the Minnesota State Investment Board provided \$6 million from public pension funds to establish a State venture capital fund. (This is a very conservative level of venture investment, given the State's total public pension fund assets of \$5.2 billion in 1987.) Superior Ventures is managed by a private investment corporation, which is raising an additional \$30 million from private sources. Further investments are expected to come from pension funds, profit-sharing plans, endowments, and foundations. The Fund has made 12 investments in 2 1/2 years, and is responsible for funding 5 companies through these investments.

Funding Mechanism

Limited partnership.

Budget

Total capitalization \$36 million, of which \$6 million is in public funds.

Investment Strategy

Superior Ventures will invest in seed capital, expansions, management buyouts, and other limited partnerships.

Technology Focus

Fund looks for market leaders across the board, from manufacturing to retail.

Eligibility

Must be a Minnesota company.

Procedures

No formal procedures; identifies opportunities where available.

2. GREATER MINNESOTA CORPORATION

Contact

Mr. Terry Montgomery
President
Greater Minnesota Corporation
1250 International Center
920 Second Avenue South
Minneapolis, Minnesota 55402
(612) 338-6666

Overview

GMC was established by the State Legislature in 1987 to promote economic development through applied research, technology transfer and product development, particularly in rural areas. In addition to establishing at least two and possibly four Regional Research Institutes, GMC is authorized to make equity and loan investments and to participate in venture capital partnerships.

Funding Mechanism

Economic Development Fund. GMC will also receive one-half of all proceeds from a State lottery, should one be established.

Budget

\$27 million FY88 as a one-time capitalization of GMC, of which \$2 million to \$3 million will be set aside for a seed fund.

Investment Strategy

The proposed seed capital fund would support the creation, expansion or redirection of regionally based, independent, privately managed seed capital funds.

Technology Focus

To be determined.

Eligibility

Preference for Minnesota businesses located outside the Minneapolis-St. Paul metropolitan area.

Procedures

- o **Application.** — Not determined.
- o **Evaluation.** — Not determined.

Terms and Conditions

Not determined.

3. VENTURE CAPITAL NETWORK OF MINNESOTA

Contact

Venture Capital Network of Minnesota
Small Business Development Center
23 Empire Drive
Saint Paul, Minnesota 55103
(612) 223-8663

Overview

Modeled on William Wetzel's Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A).

4. OTHER FORMS OF ASSISTANCE

Minnesota Project Innovation (MPI), a non-profit organization, assists small R&D companies to secure funding from the Federal SBIR program. Budget \$120,000 FY86-87; \$120,000 FY88; \$120,000 FY89; from State economic development funds.

The Enterprise Development Partnership Program (EDPP) awards grants to community coalitions for projects that assist local entrepreneurs. Grants have been awarded to provide start-up money for seed capital funds, as well as to develop small business incubators and management assistance centers. Budget: \$600,000 FY86-87; \$200,000 FY88; from State general funds.

MISSISSIPPI

1. MISSISSIPPI VENTURE CAPITAL CLEARINGHOUSE

Contact

Mississippi Venture Capital Clearinghouse
Enterprise Development Division
Mississippi Department of Economic Development
1300 Walter Sillers Building
P.O. Box 849
Jackson, Mississippi
(601) 982-6425

Overview

Mississippi's Enterprise Development Division, in the Department of Economic Development, operates the Mississippi Venture Capital Clearinghouse, which is modeled on William Wetzel's Venture Capital Network, Inc. (VCN), at the University of New Hampshire (see Appendix A).

MISSOURI

1. MISSOURI SEED CAPITAL PROGRAM

Contact

Mr. John Johnson
Executive Director
Missouri Corporation for Science and Technology
Department of Economic Development
P.O. Box 118
Jefferson City, Missouri 65102
(314) 751-3906

Overview

MCST and the four Innovation Centers it coordinates are authorized to establish seed capital funds.

Funding Mechanism

The Seed Capital Tax Credit Law, which authorizes the seed capital funds, provides a 30-percent State tax credit for contributions to these funds. The Legislature imposed a maximum of \$10 million in credits, but this should generate \$33 million in private contributions to the five funds.

Budget

Target capitalization a combined \$33 million for five funds. Two funds had been established by mid-1989 with a total capitalization of \$5 million.

Investment Strategy

\$2 million is available to guarantee loans for seed or startup capital.

Technology Focus

High technology areas.

Eligibility

Small businesses in Missouri.

Procedures

- o Application. — Contact MCST.
- o Evaluation. — Contact MCST.

Terms and Conditions

Variable.

Other Forms of Assistance

MCST, in cooperation with the Missouri Department of Economic Development and U.S. Small Business Administration, has established a statewide SBIR/High Tech SBDC to promote the Federal SBIR program and other Federal and State grant programs for small science and technology companies in the State. This center provides information on Federal solicitations, organizes information conferences, and encourages university faculty to assist small firms develop SBIR proposals. Contact: Jeff Kormann, SBIR Coordinator, Missouri Department of Economic Development, (314) 751-3906.

MCST's four Innovation Centers include the Center for Business Innovation, Inc., in Kansas City. CBI provides financial expertise and access to risk capital sources. The principal sources of seed and venture capital in the Kansas City area are the following:

- o Banks Capital Corp.;
- o Capital For Business Inc.;
- o Capital Research Mgmt. Group;
- o Merchants Bank Capital Corp.;
- o Mor American Capital;
- o MRI Ventures;
- o RAB Ventures Inc.;
- o R.W. Allsop & Associates; and
- o United Missouri Capital Corp.

In the St. Louis area, the Missouri Venture Capital Forum has sponsored at least one Entrepreneurial Capital Conference (in December 1986); contact Lary Kirchenbauer, president of the Forum, at (314) 862-5475. Sources of venture capital in St. Louis include Gateway Mid-America Partners, Capital For Business, and Allsop Associates.

Missouri has also set aside \$2.0 million from the State retirement system, earmarked for seed capital investments.

MONTANA

1. SEED CAPITAL FINANCING PROGRAM

Contact

Mr. Stephen D. Huntington
Executive Director
Montana Science and Technology Alliance
46 North Last Chance Gulch, Suite 2B
Helena, Montana 59620
(406) 449-2778

Overview

The Montana Science and Technology Alliance was created in 1985 to strengthen Montana's economy by providing a source of financing for technology-based entrepreneurial development, in order to revitalize Montana's existing industries and encourage new ones. The nine-member Montana Board of Science and Technology Development is appointed by the Governor, while the Alliance is staffed by the Montana Department of Commerce.

The program also attempts to provide a liaison between entrepreneurial companies in Montana and private investors in an effort to enhance the pool of capital available to the State's technology-based companies.

Funding Mechanism

A portion of the In-State Investment Fund of the Coal Tax Trust Fund.

Budget

\$7.5 million over the next 5 years for seed capital financings, plus an additional \$350,000 per year for administrative expenses.

Investment Strategy

If the Board determines that a company meets its investment criteria, it may loan up to \$350,000 in a single round of financing, and up to a total of \$750,000 to one company over multiple financing rounds. The alliance looks to provide "venture capital-style" financing through a mechanism that can be flexible enough to forego short-term repayment requirements and that provides the Alliance with high return-on-investment potential.

The Montana Constitution forbids the State government from holding equity shares in a company. As a result, investments are structured as loans, with an interest rate that provides a reasonable return to the Alliance, but with debt service deferred

until maturity, improving the company's short-term cash flow. However, the loan agreement may also provide for convertibility or stock warrants, allowing the Alliance to sell the debenture to a third party before maturity. Purchasers of the debentures or warrants could become direct equity holders, and the Alliance would maximize its return from successful investments.

Technology Focus

The Alliance gives priority to companies that incorporate advanced or innovative technologies, include plans for full commercialization, and address one or more of the Alliance's target technologies:

- | | |
|--|-------------------------|
| o agriculture; | o information sciences; |
| o biotechnology; | o materials science; |
| o energy; | o microelectronics and |
| o forestry; | computer sciences; and |
| o hazardous waste treatment
and waste disposal; | o minerals. |

Eligibility

Any early-stage for-profit company, located or planning to locate in Montana, that is attempting to commercialize a product or process involving innovative technology.

Procedures

- o **Application.** — Applicant submits a two-page executive summary of the project, including (1) a description of the technology involved and its competitive advantage; (2) a characterization of the market for the product; (3) an estimate of fifth-year sales revenues and job creation or retention; and (4) the amount of financing capital needed and other potential investors. The executive summary is reviewed by the Alliance's Board of Directors; if it meets the Alliance's basic financing criteria, the applicant will be asked to submit a complete business plan.
- o **Evaluation.** — Each business plan is subjected to a rigorous evaluation. The initial evaluation focuses on the technology, market potential, business plan, and management team; each applicant also makes a formal presentation to the Board of Directors. If the Board decides to pursue the opportunity, staff conducts an in-depth due diligence investigation and makes a financing recommendation to the Board. The process of staff analysis and Board action can take up to 6 months to complete.

Terms and Conditions

The Alliance takes an active role in working with its portfolio companies, including designating persons to sit as members or observers on a board of directors, requiring periodic

financial and performance reports, and assisting the company in seeking additional investment capital.

Other Forms of Assistance

The Alliance also operates a research and development financing program that provides funding for technology centers of excellence in biotechnology, advanced materials and process science, and advanced minerals and hazardous waste processing, as well as the Montana Entrepreneurship Center.

NEBRASKA

1. ENTERPRISE FUND

Contact

Mr. Frank Sekera
Executive Director
Nebraska Research and Development Authority
NBC Center, Suite 646
13th and O Streets
Lincoln, Nebraska 68508
(402) 475-5109

Overview

The Nebraska Research and Development Authority, governed by a nine-member Board appointed by the Governor, funds applied research, development, incubation, and commercialization projects with potential to contribute to the State's economy. Its Enterprise Fund (formerly the Business Investment Fund) makes equity investments in promising start-up businesses, leveraging other public and private financial resources as appropriate. For example, CDBG funds are used to provide direct loans or loan guarantees for some firms.

Funding Mechanism

State general funds. A sunset provision calls for a review of the program after 7 years -- in 1993 -- at which time it hopes to be self-supporting on the proceeds of past investments.

Budget

Not available; total NRDA budget \$1.5 million FY87, \$2.0 million FY88, \$2.0 million FY89.

Investment Strategy

NRDA makes investments in exchange for equity or royalties. Long-term venture capital or conventional financing can be arranged through the Authority, which also encourages and solicits private investment in the projects it supports. Under its original guidelines, the Enterprise Fund will purchase up to 49 percent of the qualifying securities of an enterprise.

Technology Focus

Not available.

Eligibility

The Enterprise Fund makes investments in start-up companies that export at least 80 percent of their product or service outside the State. Companies applying for funds must obtain matching funds from private sponsors. Under its original guidelines, the Fund could also make investments in incubator facilities.

Procedures

- o Application. — Not available.
- o Evaluation. — Not available.

Terms and Conditions

Not available.

Other Forms of Assistance

NRDA also supports applied research that will lead directly to a business start-up, and it serves as a clearinghouse for research, technical referrals and information (e.g. on Federal SBIR programs).

2. NEBRASKA VENTURE CAPITAL NETWORK

Contact

Nebraska Venture Capital Network
University of Nebraska at Omaha
1313 Farnham, Suite 132
Omaha, Nebraska 68182-0423
(402) 595-2381

Overview

Modeled on William Wetzel's Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A).

NEVADA

No State-sponsored seed capital program.

NEW HAMPSHIRE

New Hampshire has no State-sponsored seed capital program. However, the University of New Hampshire is the site of the original not-for-profit Venture Capital Network, Inc. (see Appendix A). For information, contact:

Ms. Helen Goodman
Venture Capital Network, Inc.
P.O. Box 882
Durham, New Hampshire 03824
(603) 743-3993

NEW JERSEY

Although New Jersey has no State-sponsored seed capital fund, the State encourages and supports pre-market innovation through other means. These include advanced technology programs built on targeted university research and technology transfer, namely the Advanced Technology Centers, Innovation Partnership grants, and industrial and technology extension programs. The State also provides bridge financing between Phase I and Phase II of the Federal SBIR program. For further information, contact:

Mr. Edward Cohen
Executive Director
New Jersey Commission on Science & Technology
122 West State Street, CN 832
Trenton, New Jersey 08625-0832
(609) 984-1671

NEW MEXICO

1. SEED CAPITAL FOR ENTREPRENEURIAL TECHNOLOGY DEVELOPMENTS

Contact

Dr. Larry Icerman
Director
New Mexico Research and Development Institute
Pinon Building, Suite 358
1220 South St. Francis Drive
Santa Fe, New Mexico 87501
(505) 827-5886

Overview

This program seeks to accelerate the commercialization of New Mexico-based technology-related products, processes and services. It provides seed capital to entrepreneurs for product development, with the goal of creating new jobs and State revenues from new and expanded businesses.

Funding Mechanism

State general funds.

Budget

Total R&D budget is between \$4 million and \$5 million annually; seed capital budget was \$3.1 million in FY87 and \$2.65 million in FY88. A total of \$8.0 million had been appropriated to the seed capital program by January 1989. NMRDI also administers the nearly \$5-million annual budget of New Mexico's Technology Commercialization Office and the five university-based Centers of Technical Excellence.

Investment Strategy

Awards are made through R&D contracts, but with a royalty payback provision. If the development effort succeeds in the marketplace, NMRDI shares in the sales revenues of the company, in accordance with an established repayment schedule. If the venture fails, no repayment is required.

Technology Focus

The program expands an earlier successful program that focused exclusively on energy-related products. Recent contracts have included design, development and testing in the areas of biotechnology, computer applications, electronic instrumentation, energy and environmental control technologies, and medical sciences.

NEW YORK

1. NEW YORK STATE BUSINESS VENTURES PARTNERSHIP

Contact

Mr. Douglas S. Luke, Jr.
Senior Vice President
Rothschild Ventures, Inc.
One Rockefeller Plaza
New York, New York 10020
(212) 757-6000

Overview

This privately managed venture capital limited partnership was capitalized in 1987 by the New York State Common Retirement Fund (\$50 million) and the New York State Teacher's Retirement System (\$20 million). It invests in New York companies at the start-up and expansion stages and in leveraged buyouts. Additional information is available from Rothschild Ventures.

Funding Mechanism

Equity and other instruments with equity conversion features are the preferred forms of investment.

Budget

Total capitalization \$75 million at the end of 1987.

2. VENTURE CAPITAL NETWORK OF NEW YORK, INC.

Contact

Venture Capital Network of New York, Inc.
P.O. Box 248
Lake Placid, New York 12946
(518) 564-3227

Overview

Modeled on William Wetzel's Venture Capital Network, Inc. (VCN), at the University of New Hampshire (see Appendix A).

NEW YORK

1. NEW YORK STATE BUSINESS VENTURES PARTNERSHIP

Contact

Mr. Douglas S. Luke, Jr.
Senior Vice President
Rothschild Ventures, Inc.
One Rockefeller Plaza
New York, New York 10020
(212) 757-6000

Overview

This privately managed venture capital limited partnership was capitalized in 1987 by the New York State Common Retirement Fund (\$50 million) and the New York State Teacher's Retirement System (\$20 million). It invests in New York companies at the start-up and expansion stages and in leveraged buyouts. Additional information is available from Rothschild Ventures.

Funding Mechanism

Equity and other instruments with equity conversion features are the preferred forms of investment.

Budget

Total capitalization \$75 million at the end of 1987.

2. VENTURE CAPITAL NETWORK OF NEW YORK, INC.

Contact

Venture Capital Network of New York, Inc.
P.O. Box 248
Lake Placid, New York 12946
(518) 564-3227

Overview

Modeled on William Wetzel's Venture Capital Network, Inc. (VCN), at the University of New Hampshire (see Appendix A).

NORTH CAROLINA

1. INNOVATION RESEARCH FUND

Contact

Mr. Brent Lane
Executive Director
North Carolina Technological Development Authority
430 N. Salisbury Street
Raleigh, North Carolina 27611
(919) 733-7022

Overview

NCTDA, established in 1983 as a part of the Department of Commerce, is designed to stimulate job creation through the development of new and expanding small businesses. The IRF provides equity financing of up to \$100,000 per year for research activities leading to the development or improvement of new products, processes or services and the subsequent start-up or growth of new firms.

Funding Mechanism

State general funds.

Budget

\$1 million (FY88). The Fund has also received at least \$5 million in private dollars. As of April 1989 it had invested a total of \$2.6 million in 46 early-stage companies.

Investment Strategy

NCTDA receives royalties from the revenues produced by successful products.

Technology Focus

Contact NCTDA.

Eligibility

Contact NCTDA.

Procedures

- o Application. — Annual submission cycle.
- o Evaluation. — Available from NCTDA.

Terms and Conditions

Not available.

Other Forms of Assistance

NCTDA provides grants of up to \$200,000 to nonprofit organizations for the establishment of business incubators. Six such facilities have been launched, although none is specifically designed for technology-oriented companies. Budget: \$600,000 (FY88). NCTDA also serves as a clearinghouse on Federal SBIR programs and helps small companies to apply for SBIR grants.

NORTH DAKOTA

1. NORTH DAKOTA VENTURE CAPITAL CORPORATION

Contact

Mr. Thomas F. Hunt, Jr.
Fund Manager, NDVCC
Capital Dimensions, Inc.
Two Appletree Square, Suite 244
Minneapolis, Minnesota 55425
(612) 854-3506

Overview

Also known as the Myron Nelson Fund, Inc., NDVCC is a privately funded and managed, for-profit venture capital limited partnership. It will soon be opening an office in North Dakota.

Funding Mechanism

North Dakota provides a 25-percent State tax credit for investments in chartered partnerships, with a maximum credit of \$50,000 per person.

Budget

An estimated \$10 million to \$15 million over the next 3 years.

Technology Focus

Primary sector industries in North Dakota, with an emphasis on university-based technologies and technological entrepreneurs.

Eligibility

Venture capital firms must meet approval criteria and small businesses must be certified for investment.

Procedures

- o Application. — Write or call Capital Dimensions.

Terms and Conditions

Not specified.

Other Forms of Assistance

Beginning in 1985, North Dakota also authorized the State Investment Board to invest directly in the common or preferred stock of any corporation organized under the laws of North Dakota. This legislation allows equity purchases with up to

20 percent of the assets of the following public funds: State Bonding Fund; Teachers' Retirement Fund; State Fire and Tornado Fund; Workers' Compensation Fund; and Soldiers Home Improvement Fund.

2. FIRST SEED CAPITAL GROUP

Contact

Mr. Bruce Gjovig
First Seed Capital Group
P.O. Box 8103
Grand Forks, North Dakota 58202
(701) 777-3132

Overview

A group of private investors who are interested in investing in emerging technologies and new ventures in North Dakota.

Funding Mechanism

Private investors through limited partnerships, private stock offerings, and open to other mechanisms.

Budget

Maximum investment of \$150,000 in any one venture.

Investment Strategy

Investments decisions are based on growth potential, market opportunity, management team, and uniqueness or market differential of the technology.

Technology Focus

University-based technologies with proprietary protection.

Eligibility

North Dakota firms and individuals.

Procedures

Application. — Forms available from above contact; business plan is required.

Evaluation. — All investments are evaluated by the staff of the University of North Dakota Center for Innovation and Business Development.

Terms and Conditions

Negotiable; can take the form of stock, partnerships, or royalties.

OHIO

1. EDISON SEED DEVELOPMENT FUND

Contact

Mr. Larry McGeehan
Ohio Edison Seed Fund
Ohio Department of Development
P.O. Box 1001
Columbus, Ohio 43266-0101
(614) 466-3887

Overview

SDF provides matching funds for joint university-industry projects of applied research, development and/or commercialization that will lead to business expansion or job creation in Ohio. SDF is administered by the Ohio Department of Development with guidance from the Industrial Technology and Enterprise Advisory Board, an independent bipartisan body made up of seven private citizens and two members of the State Legislature.

Funding Mechanism

State general funds.

Budget

As of April 1988, SDF had provided \$9 million in seed funds to over 65 companies for a total of 94 separate projects, matched by a total of \$13 million in private funds.

Investment Strategy

SDF resembles the Federal SBIR program in providing two types of support for two types of R&D:

- o Class 1 Early Stage Research Projects receive grants of between \$10,000 and \$50,000 to demonstrate, within 1 year, the technical feasibility of a new product, process or system. Successful projects are encouraged to apply for Class 2.
- o Class 2 Advanced Applied Research Projects receive "grants" of up to \$250,000 for further development, within 2 years, of a product for commercialization or at least a demonstration prototype. Class 1 is not a prerequisite for Class 2. In the event of successful commercialization, the State seeks a return on its investment in the form of limited royalties or a share of license fees.

Technology Focus

Proposals must involve innovative technology, but no particular discipline or sector is favored. Projects in the areas of specialization of the Edison Technology Centers (ETCs) may have a better chance of funding (see below). Basic research is explicitly excluded from funding.

Eligibility

Projects must be jointly sponsored by a university and a private partner, but they need not be affiliated with any of the ETCs. Support from business participants must at least equal State funds, and participating companies must operate in Ohio or agree to locate an R&D or manufacturing facility in the State. A recent evaluation of the Edison Program suggested that companies that are members or affiliates of an ETC should receive priority in funding by SDF, particularly for projects that would be conducted at the ETCs.

Procedures

- o **Application.** — SDF considers proposals on a rolling basis and announces new awards every month.
- o **Evaluation.** — Processing time is approximately 12 weeks. Proposals are evaluated for both technical merit and business potential. Greater weight is given to applications in which:
 - * the private contribution exceeds the State grant;
 - * the applicant is a small business;
 - * the private contribution is cash rather than in-kind;
 - * the project involves increased university/industry interaction, such as cooperative education, personnel exchanges or graduate student internships;
 - * the university partner agrees to reduce overhead and indirect costs for a small business partner; and/or
 - * a commitment has been made for private follow-on funding.

Terms and Conditions

Grantees are required to submit quarterly progress and financial reports, as well as a final report summarizing expenses, results, and applications of the research.

Other Forms of Assistance

The Technology Information Exchange-Innovation Network (TIE-IN), an on-line computer database maintained by the Thomas Edison Program and the Ohio Technology Transfer Organization (OTTO), includes a county-by-county listing of venture opportunities and business assistance resources, as well as other technical and business information.

Ohio enacted legislation in 1982 permitting the Public Employees Retirement System (PERS) to invest up to 5 percent of its assets in venture capital limited partnerships, providing one of three criteria is met: (1) the partnership is headquartered in Ohio; (2) 50 percent of its assets are located in Ohio; or (3) 50 percent of its employees are located in Ohio. As of July 1987, a total of \$20 million in PERS funds had been placed in two professional venture capital companies, and the PERS staff was managing another \$50.6 million in direct equity venture investments. Contact: Robert McLaughlin, Investment Officer, PERS, (614) 466-7320.

OKLAHOMA

In September 1988, the Oklahoma Legislature passed a constitutional amendment allowing the Oklahoma Center for the Advancement of Science and Technology (OCAST) to make seed capital investments. The amendment requires that any enterprise in which such an investment is made must be "involved with research or patents from projects involving Oklahoma colleges or universities." Legislation to implement the amendment and authorize appropriations is pending before the Legislature, as of April 1989. The earliest that the program is likely to be operational and funded is in the fall of 1989.

OREGON

1. RESOURCE AND DEVELOPMENT SEED CAPITAL FUND

Contact

Mr. John Beaulieu
President
Oregon Resource and Technology Development Corporation
One Lincoln Center, Suite 430
10300 S.W. Greenburg Road
Portland, Oregon 97223
(503) 246-4844

Overview

The Seed Capital Fund is one of three programs administered by the Oregon Resource and Technology Development Corporation, a public nonprofit corporation created by the Legislature in 1985. ORTDC's mission is to foster innovation by existing Oregon industry and to aid in the development of new technology-based businesses in the State. The program has been fully operational since September 1986.

Funding Mechanism

State lottery program. ORTDC received \$5.5 million in lottery proceeds during the 1985-87 biennium and is scheduled to receive another \$3.0 million during 1987-89. [THESE FIGURES FROM SBA]

Budget

As of April 1989, the portfolio included 19 investments in Oregon companies, totaling \$5.5 million.

Investment Strategy

ORTDC provides up to \$500,000, on an equity basis, for product and market development.

Technology Focus

ORTDC seeks to promote the development of technically innovative products or processes. Its investments and services focus on three sectors:

- o existing resource-based industries, including agriculture, forestry, fisheries, and metals;
- o existing advanced technology industries; and
- o emerging industries.

Eligibility

Not available.

Procedures

- o Application. — Not available.
- o Evaluation. — ORTDC has three staff members who review project proposals and make recommendations to the Board of Directors.

Terms and Conditions

Not available.

Other Forms of Assistance

ORTDC also provides product development and commercialization assistance in two other program areas:

- o Applied Research Fund. — The Corporation provides applied research grants to both private businesses and educational institutions. Grants awards are limited to \$100,000 and require on-to-one matching funds. Budget: \$2.54 million (FY86-87). Contact: Wayne Embree, Deputy Director, ORTDC, (503) 246-4844.
- o Technical and Managerial Assistance. — The Corporation also provides referral services to new, small and emerging businesses.

2. NORTHWEST CAPITAL NETWORK

Contact

Ms. Denise Jackson
Northwest Capital Network
P.O. Box 25230
Portland, Oregon 97225-0230
(503) 294-0643

Overview

ORTDC also cosponsors the Northwest Capital Network, a database referral service that matches investors with businesses seeking capital. NCN is modeled on and affiliated with the Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A).

PENNSYLVANIA

1. SEED VENTURE CAPITAL FUND

Contact

Mr. Jacques Koppel
Director
Office of Technology Development
Pennsylvania Department of Commerce
Harrisburg, Pennsylvania 17120
(717) 787-4147

Overview

Under Pennsylvania's comprehensive Ben Franklin Partnership (BFP), each of the State's four Advanced Technology Centers (ATCs) has become a limited partner in a regional seed capital fund. The five seed capital funds (two funds in Pittsburgh) were capitalized through \$4.5 million in appropriations in 1984 and 1986, matched six-to-one by the private sector investments. Seed investments are made in Pennsylvania firms at the startup stage, usually in the \$50,000 to \$250,000 range. In addition, Pennsylvania's two public-employee pension funds have invested over \$150 million with private venture capital firms; these funds are available for later rounds of investment in firms that receive seed capital.

- o **Pittsburgh.** — Southwestern Pennsylvania is the only region to receive two grants from the Small Business Seed Fund program. The CEO Venture Fund, a private for-profit fund, was organized in 1984 by the Pittsburgh High Technology Council. Capitalized at \$10 million, of which more than half is already invested, the fund has 28 limited partners, including 4 larger venture capital funds, 5 corporations, 11 individuals, and 3 family foundations, in addition to a \$625,000 grant from BFP and additional funds from the University of Pittsburgh and Carnegie-Mellon University. It will invest between \$300,000 and \$750,000 in companies within 50 miles of Pittsburgh, with a preference for second-round advanced technology ventures and firms in traditional sectors that are adopting new technology. The fund works closely with the Western Pennsylvania ATC (WP-ATC) and larger corporations for assessments of new products and entrepreneurial managers. The Pittsburgh Seed Fund also received \$750,000 from BFP through WP-ATC, and over \$7 million from other sources. It was organized by the Enterprise Corporation to remedy the shortage of "angels" in the region. The Seed Fund will invest at an earlier stage than the CEO Venture Fund, and many of its initial investments were in WP-ATC client companies. In addition, at least seven new venture capital partnerships have sprung up in the Pittsburgh region during the past

5 years, with much of their \$150 million total capitalization coming from State pension funds. These larger funds often invest in the smaller seed funds in order to create a "window" on early-stage companies in which they will later invest larger amounts of conventional venture capital.

- o Bethlehem. — The North East Tier ATC (NET-ATC) played a major role in establishing the NEPA Venture Fund. This is the first venture capital partnership in the eastern half of the State, outside of Philadelphia, and the only one that specializes in providing equity capital to local companies. To launch the fund, NET-ATC found four successful local entrepreneurs who were willing to help other startups in the region, and used a search firm to hire a managing partner to raise the rest of the capitalization -- \$11 million, including \$750,000 from BFP, \$1 million from a large private venture capital firm, and large amounts from both the State Employees' Pension Fund and the State Teachers' Pension Fund.
- o Philadelphia. — The ATC of Southeastern Pennsylvania (ATC-SEP) is a limited partner, along with the Philadelphia Industrial Development Corporation (PIDC), in the Penn Venture Fund. Like the other seed funds, it a \$750,000 grant from BFP. PIDC also organizes a two-day Entrepreneurs Exchange to strengthen investment networks in the region.
- o State College. — The ATC of Central and Northern Pennsylvania (ATC-CNP) is a limited partner, along with Pennsylvania State University, in Zero Stage Capital of Pennsylvania. The initial grant of \$750,000 from BFP was leveraged by \$1.25 million from the Penn State endowment and \$8 million in private funds to create a \$10 million seed capital fund.

Funding Mechanism

Bond issue. Grants of \$750,000 were given to BFP's four ATCs, which in turn became limited partners in the five regional seed capital funds. The ATCs selected a general partner to manage each fund, and BFP funds had to be matched three-to-one by other sources. The regional funds have attracted financial support from State pension funds (below), as well as utilities, banks, apparel and technology manufacturers, and other sources.

Budget

Total capitalization approaching \$50 million, of which \$4.5 million came from the State government -- \$3.0 million from a bond issue in FY84 and another \$1.5 million bond issue in FY86-87. As a result, the program may have enough remaining State funds to create one more regional seed fund.

Investment Strategy

Each seed venture fund has a life of 8 to 10 years. They fill gaps in existing capital markets by making small investments to firms just being established. Deals are in the \$50,000-to-\$250,000 range and involve purchase of equity in the companies. Preference is given to firms that are tenants in one of BFP's many small business incubator facilities. It is also expected that a number of spinoffs from BFP R&D Challenge Grants will receive funding from the Seed Venture Capital Fund.

Technology Focus

Each ATC designates the sectors and geographical areas on which its seed fund will focus.

Eligibility

Firms must have less than 50 employees; and must be independently owned and operated; and must be located in Pennsylvania or move to the State prior to receipt of the investment. Firms located in the State's 27 small business incubators are given "special attention," as are those that have received BFP Challenge Grants. The funds are prohibited from investing in mercantile businesses, i.e. retail and restaurants.

Procedures

- o Application. — Contact BFP, local ATCs, or the individual venture funds.
- o Evaluation. — — Contact BFP, local ATCs, or the individual venture funds.

Terms and Conditions

Variable.

Other Forms of Assistance

Challenge Grant for Technological Innovation. — This is the principal funding mechanism for BFP. During 1988-89, nearly \$30 million of BFP's \$31.5 million appropriation supported the Challenge Grant program. These matching State grants support R&D efforts, entrepreneurial development (including seed and venture capital), and education and training activities. The Challenge Grant program brings businesses and university researchers together to find innovative ways to improve competitiveness and profitability through the application of technology.

Small Business Research "Seed" Grant Program. — In both FY87 and FY88, BFP provided \$1 million in "research seed grants" (maximum \$35,000) to qualified SMEs (less than 250 employees, preference to less than 50 employees) for feasibility studies,

prototype development and market introduction of advanced technology products. The four ATCs also assist small firms in applying for grants from the Federal SBIR program.

Pennsylvania Industrial Development Authority. — PIDA has specifically targeted 25 percent of its general fund appropriation (or \$3 million out of a total \$12 million in FY88) for loans to advanced technology companies. In addition, PIDA makes loans to public and private organizations for the establishment of small business incubators and mixed-use buildings.

Pension funds. — Pennsylvania's two State pension funds have been authorized to investing up to 1 percent of their assets, or \$150 million, in venture capital firms in Pennsylvania. About \$32 million had been placed in such investments by July 1987. This has created a diversified portfolio of investments in regional seed funds (above), regional venture funds, and a Pennsylvania Venture Fund. The enabling legislation, in 1984, directed that the investments be made so as to serve the "general welfare" of the citizens of Pennsylvania. The pension boards have implemented this clause by requiring that 50 percent of venture investments, and 100 percent of seed investments, be made with Pennsylvania-based entrepreneurs or firms.

PUERTO RICO

We were able to identify no Commonwealth-sponsored seed capital program in Puerto Rico.

RHODE ISLAND

Rhode Island has no State-sponsored seed capital fund. Like New Jersey, Rhode Island relies on collaborative industry-university efforts to help bring new technologies into the marketplace. The Rhode Island Partnership for Science and Technology — itself a nonprofit, cooperative effort of government, academic institutions and the private sector — provides funds for collaborative efforts involving at least one Rhode Island university, hospital or other nonprofit institution and including at least one commercial, for-profit corporation.

For further information, contact:

Mr. Bruce Lang
Executive Director
Partnership for Science and Technology
7 Jackson Walkway
Providence, Rhode Island 02903
(401) 277-2601

SOUTH CAROLINA

1. PALMETTO SEED CAPITAL FUND

Contact

Mr. Wayne L. Sterling
Acting Director
South Carolina State Development Board
P.O. Box 927
Columbia, South Carolina 29202

Overview

The Palmetto Seed Capital Fund (PSCF) is part of a more diversified economic development strategy, providing the State with the capacity to support internally driven growth ("enterprise development") as well as industrial recruitment. PSCF will be managed by its general partner, the Palmetto Seed Capital Corporation (PSCC), a private, for-profit corporation. PSCC will be subject to unlimited liability, and its Board of Directors is in the process of selecting a permanent president or director. The Governor appoints the chairman of the Board of Directors, and the State Development Board selects two additional directors; these three directors elect three additional members from the private sector; and the seventh board position will be held by the PSCC president or manager.

Funding Mechanism

The State will offer a 30-percent tax credit to private investors who capitalize PSCF, with a \$5-million cap on the credits available -- equivalent to a total capitalization of \$16.7 million. The credit includes a 10-year carry-forward provision, but no more than half of each investor's total credit may be redeemed in any one year. Preliminary estimates indicate that every dollar in tax credits will lead to between \$2.27 and \$4.50 in new tax revenues in the future. In addition, 75 percent of the profits or capital gains will be deductible from State income taxes, if the are earned on investments in qualifying rural areas, businesses owned by socially or economically disadvantaged persons, or enterprises engaged in agribusiness or aquaculture. Preliminary guidelines call for minimum investments of \$50,000 from individuals and \$75,000 from corporations and financial institutions. Funds must remain in the Fund for 5 years to qualify for the tax credit, but limited partners can use any losses from PSCF to offset profits from other passive investments.

Budget

Expected initial capitalization of PSCF is \$10 million. Its tax credit will cover a total of \$16.7 million, and it must have \$3

million before it can begin making investments. As with most seed funds, staff and operations will be covered by a management fee of approximately 5 percent, modified according to performance.

Investment Strategy

PSCF will make 70 percent of its dollar investments in seed capital, usually co-venturing with local venture capitalists and other investors. PSCF's investments will take the form of equity, convertible debentures and/or warrants [OPTIONS?], not conventional loans. The other 30 percent can be used for later-round financing of high-growth companies, or for additional seed investments. Promotional literature anticipates "exit" in 4 to 7 years.

Technology Focus

Agribusiness and aquaculture, in addition to enterprises in rural areas and those founded by socially or economically disadvantaged individuals.

Eligibility

For purposes of PSCF, "seed capital" is money invested in a firm that is no more than 3 years old, and only for use in product development and/or initial market entry. Promotional literature makes it clear that "only firms with strong potential for extremely fast growth will be serious candidates for PSCF investments." The Fund may make some investments outside the State.

Procedures

- o **Application.** — A comprehensive business plan, describing the perspective product or service, the industry in which it will operate, its competitors, its full marketing plan, its 3- and 5-year financial projections (with all assumptions made explicit), and its proposed management team (with full resumes and indication of commitment).
- o **Evaluation.** — Not available.

Terms and Conditions

Not available.

Other Forms of Assistance

The State's Jobs and Economic Development Authority (JEDA) has recently created the Carolina Capital Investment Corporation (CCIC), which is empowered to make equity investments. CCIC is not yet well established, however, and it is limited to \$75,000 on any single investment. In addition, its only source of funds is a \$2-million line of credit from a number of South Carolina banks, which means that it must earn an early and steady stream of

income in order to meet its repayment schedule. Both of these features prevent CCIC from making true seed capital investments by itself, although it may be a partner in some of PSCF's investments.

The State Development Board conducts an annual Capital Connection Conference, to introduce South Carolina entrepreneurs to venture capitalists from around the Nation. The Board also serves as a one-stop information center for new and expanding businesses.

2. PRIVATE INVESTOR NETWORK

Contact

Private Investor Network
Economic Enterprise Institute
University of South Carolina at Aiken
Aiken, South Carolina 29801
(803) 648-6851

Overview

The Private Investor Network in Aiken is modeled on William Wetzel's Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A).

SOUTH DAKOTA

South Dakota has no State-sponsored seed capital program.

TENNESSEE

1. UNIVERSITY [OF TENNESSEE] VENTURE CAPITAL CENTER

Contact

Mr. David Houghton
Manager, Marketing Program
University Venture Capital Center
Communications Building, Suite 415
University of Tennessee
Knoxville, Tennessee 37996-0344
(615) 974-8768

Overview

The Center operates statewide, assisting economic development through venture capital funding of start-up companies and ongoing businesses. It conducts workshops State-wide on its own programs and on the Federal SBIR Program. However, it is currently limited to serving technologies coming out of the University of Tennessee.

2. VENTURE EXCHANGE FORUM

Contact

Mr. David Patterson
President
Tennessee Technology Foundation
P.O. Box 23184
Knoxville, Tennessee 37933
(615) 694-6772

Overview

Conducts workshops in cooperation with academic partners to stimulate venture capital formation.

3. TENNESSEE VENTURE CAPITAL NETWORK

Contact

Tennessee Venture Capital Network
7 Cope Administration Building
Middle Tennessee State University
Murfreesboro, Tennessee 37132
(615) 898-2512

Overview

Modeled on William Wetzel's Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A).

TEXAS

Texas has recently undertaken four major initiatives that should improve the availability of risk capital and increase the success rate for long-term economic development:

- o **VENTURE CAPITAL NETWORK, INC.** — Modeled on William Wetzel's original Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A). VCN of Texas, sponsored by San Antonio and other cities, was established in January 1987; by the end of that year it had 80 participating investors (half of them from outside San Antonio) and had made over 200 matches, leading to 12 deals being closed.
- o **CAPITAL FORMATION NETWORK.** — Also modeled on the Venture Capital Network Network, Inc. (see Appendix A), but serving the Houston area.
- o **TEXAS GROWTH FUND.** — The voters have authorized various constitutional trust funds and statutory pension systems to voluntarily invest to promote economic development in the State. Up to 10 percent of the resulting Fund may be invested in venture capital for small business and high-technology firms. The Fund is not yet operational, pending the appointment of board members, an organizational meeting, and development of project investment guidelines.
- o **OFFICE OF ADVANCED TECHNOLOGY AND PRODUCT DEVELOPMENT COMMERCIALIZATION FUND.** — Proposed legislation currently pending in the Texas Legislature would create a fund to finance the commercialization of new or improved products or processes for which financing is not reasonably available from private sources. Special preference will be given to loan applications for projects that have the greatest likelihood of commercial success; to those that have potential to create or retain the most jobs in the State; and to loans to grantees under the Small Business Innovation Research program.

UTAH

1. UTAH TECHNOLOGY FINANCE CORPORATION

Contact

Mr. Grant L. Cannon
Executive Director
Utah Technology Finance Corporation
419 Wakara Way, Suite 215
Salt Lake City, Utah 84108
(801) 583-8832

Overview

UTFC was created in 1983 to provide seed capital for entrepreneurs and small businesses in the initial phases of the business cycle. The original plan, for UTFC to invest public funds in private enterprises, was blocked by the State Attorney General and Supreme Court in 1985. The decision by the State Supreme Court was that UTFC could not take an equity position in private enterprises. However, it was determined that UTFC could fund companies on a royalty-payback basis; UTFC has been doing so since 1986.

Funding Mechanism

The vast majority of funds are appropriated from the Utah Legislature annually. Partnership agreements exist with several counties whereby projects in a particular county are funded jointly with UTFC and county monies.

Budget

FY1984 \$1.1 million; FY1985 \$1.7 million; FY1986 \$91,000; FY1987 \$1.4 million; and FY1988 \$1.5 million. UTFC had disbursed \$1.4 million to 37 businesses as of December 1988.

Investment Strategy

UTFC has two components: grants and loans. The grant component provides competitive awards of up to \$50,000 for activities similar to those funded by SBIR Phase I. UTFC is also authorized to provide "bridge" financing between Phases I and II of the Federal SBIR Program. The loan component cooperates with Utah's banking institutions to provide risk capital to small businesses in the State.

Technology Focus

UTFC looks for "high tech" innovations that have a unique technology with a high probability of rapid growth. Examples of innovations that have been funded include lasers, computer

software and printers, several different types of medical devices, small commercial satellites, robotics, etc.

Eligibility

Bridge grants are available to winners of SBIR Phase I grants who expect to receive Phase II awards.

Procedures

Annual solicitation process.

Other Forms of Assistance

UTFC continues to hold workshops on the Federal SBIR program and works with the private sector to address the need for seed and venture capital in the State. The Mountain West Venture Group, an ally of UTFC in Salt Lake City, resembles private sector entrepreneurship support groups in many other communities. Utah Ventures has been organized to make investments primarily in Utah; size of pool is \$10.5 million. There have also been efforts to form a "feeder" seed capital fund, called American Intermountain Ventures, to make investments in start-up and emerging growth companies located primarily in Utah; target for capitalization is \$20 million.

VERMONT

1. VERMONT VENTURE CAPITAL FUND

Contact

Mr. Gregory B. Peters
Vermont Venture Capital Fund
Seven Burlington Square, Suite 600
Burlington, Vermont 05401
(802) 658-7840

Overview

VVCF is a privately managed, for-profit venture capital limited partnership established in 1987.

Funding Mechanism

The State provides a 50-percent tax credit to private investors who become limited partners.

Budget

Total capitalization \$7.6 million.

Investment Strategy

High-growth companies, usually in high technology, from early stage to buyout. Investments are for the long term: 5 to 7 years in early stage companies, 3 to 5 years in later stage firms.

Technology Focus

Four principal areas: high technology, applied technology, services, and consumer goods.

Eligibility

Early product and technology stage, solid management team, and a good 3-to-5-year plan.

Procedures

- o Application. — Submit business plan to above address.
- o Evaluation. — Return on capital investment is the primary concern, with a target of 30 to 35 percent overall return on portfolio. Secondary criteria are job creation and increased tax revenues.

Other Forms of Assistance

VVCF will assist companies with financing and business strategies for market development.

VIRGINIA

As of July 1989, Virginia's new Virginia Economic Development Corporation (VEDCORP) is expected to be formed and ready for operation. VEDCORP will be a private sector financial corporation, organized under Virginia statutes and qualified to meet the standards of a Community Development Corporation.

Capitalized with investments from the banking and business communities, VEDCORP will make both debt and equity investments in small businesses in rural Virginia. At the same time, it is expected to have a bias in favor of advanced technology enterprises, including new ventures based on technology transfer. For further information, contact:

Dr. Berkwood M. Farmer
Executive Director
Rural Virginia Development Foundation
223 Governor Street
Richmond, Virginia 23219
(804) 786-3978

WASHINGTON

Washington has no State-funded seed capital program. However, the State Business Assistance Center operates the Washington Investment Network, a referral program modeled on the original Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A); for information, contact:

Washington Investment Network
Washington State Business Assistance Center
919 Lakeridge Way, S.W., Suite A
Olympia, Washington 98502
(206) 753-5632

In addition, Washington has placed more public employee pension funds in venture investments than any other State. The Washington State Investment Board (WSIB), like many other public pension funds, uses a "prudent investor" standard that allows its investment managers broad authority to diversify pension fund investments and seek higher rates of return. As a result, WSIB had placed \$271 million in venture capital limited partnerships by July 1987, or slightly over 2 percent of its total assets. In addition, WSIB had committed another \$870 million to leveraged buyouts (LBOs) through other limited partnership arrangements. There are no geographic limitations on investments.

WEST VIRGINIA

1. WEST VIRGINIA CAPITAL COMPANIES

Contact

Ms. Elizabeth Ann Shabb
Governor's Office of Community and Industrial Development
Charleston, West Virginia 25305
(304) 348-0400

Overview

Privately funded and managed, for-profit venture capital limited partnerships. Nineteen companies, each with at least \$1 million in capital, had been formed by mid-1989. A complete list is available from the above contact.

Funding Mechanism

West Virginia offers a 50-percent credit against net income taxes for individuals, corporations or partnerships who make investments in certified West Virginia Capital Companies. There is a limit on the amount of credit allowable in any given year, but the unused credit may be carried forward or backward until used. On March 9, 1989, the State filed rules requiring that at least 25 percent of these funds be used for equity investments.

Budget

Not applicable.

Investment Strategy

The program is designed to stimulate the formation of venture and risk capital in West Virginia. Individual funds determine their own investment strategies.

Technology Focus

Varies by fund.

Eligibility

Varies by fund.

Procedures

- o Application. — Varies by fund.
- o Evaluation. — Varies by fund.

Terms and Conditions

Varies by fund.

WISCONSIN

1. WISCONSIN TECHNOLOGY DEVELOPMENT FUND

Contact

Mr. Jim Frymark
Program Manager
Bureau of Development Finance
Wisconsin Department of Development
P.O. Box 7970
Madison, Wisconsin 53707
(608) 266-2742

Overview

Established by Wisconsin statute 560.62 for the development of new, or the improvement of existing, industrial products or processes.

Funding Mechanism

Grants or loans.

Budget

From July 1988 to April 1989, the Fund had financed 19 consortia for a total of \$3 million.

Investment Strategy

To improve the Wisconsin economy.

Technology Focus

Not specified.

Eligibility

Consortia of businesses and higher education institutions for research and development that will result in economic benefit for Wisconsin.

Procedures

- o **Application.** — Applicants submit a brief application that responds to the evaluation criteria listed below, in the same order, along with a one-page summary. Applicants should qualify their data wherever possible in terms of impacts, specifically job creation, leverage of private dollars, and benefits to the local, regional and State economies. Applicants are encouraged to consult with Department Staff

to determine eligibility, clarify the application process, and determine the availability of funds.

- o **Evaluation.** — All submissions are reviewed by an appointed Wisconsin Development Finance Board, which considers all of the following criteria:
 - * the extent to which the project will retain or increase employment in the State;
 - * the extent to which the project will contribute to the economic growth of the State and the well-being of the residents of the State;
 - * whether the project will be located in an area of high unemployment or low average income;
 - * the financial soundness of the business; and
 - * the intention of the recipient to repay the grant or loan.

Terms and Conditions

In addition to the above criteria, the Board will also determine if the following conditions are met:

- o the project serves a public purpose;
- o the project is not likely to occur without the grant or loan;
- o financing is unavailable from any other source on reasonably equivalent terms;
- o the recipient will contribute, from funds not provided by the State, at least 25 percent of the project costs;
- o the project meets all program criteria;
- o the project will not displace any workers in the State; and
- o funds from the grant or loan will not be used to pay overhead cost or to replace funds from another source.

WYOMING

Wyoming has no State-sponsored seed capital program at this time. However, the State does have a referral program modeled on the Venture Capital Network, Inc., at the University of New Hampshire (see Appendix A). Contact:

Wyoming Investor Network
Casper College SBDC
130 North Ash Street, Suite A
Casper, Wyoming 82601
(307) 235-4825

APPENDIX A

VENTURE CAPITAL NETWORKS

Overview

Many State and local governments and universities have sponsored these mechanisms, which are modeled on William Wetzel's Venture Capital Network, Inc. (VCN), an independent entity that is affiliated with the Whittemore School of Business at the University of New Hampshire. Wetzel has travelled extensively in recent years to help other geographical areas establish VCNs that are affiliated with the original.

VCNs are designed to match entrepreneurs with nearby investors who are interested in early-stage deals in specific technologies or industries. Most of them operate in the same fashion: the Network (usually organized as or sponsored by a nonprofit organization) maintains a confidential computerized database that contains profiles of investment opportunities (from entrepreneurs, who pay a fee and are screened by staff) and investment interests (from "angels" and other investors, who are not identified publicly). The Network identifies matches through a three-step process: the investor is given a list of companies in his area of interest; if any look promising, the investor can request a summary of their business plans; and once a single company is chosen, the Network introduces the investor and the entrepreneur. Once this introduction has been made the VCN ceases to participate in their relationship.

Funding Mechanism

Fees charged to the entrepreneurs and, in some cases, the investors for the matching service provided. In most cases, however, the VCN and its sponsoring institution take no commission on or interest in the outcome of their introductions.

Budget

Varies.

Investment Strategy

These programs are often designed to provide access to capital for new small firms for which conventional financing is limited or nonexistent. The VCN keeps a record of the reasons given by investors who reject investment opportunities, and this information is made available to the entrepreneur. The VCN provides a source of information and point of entry to the "informal" investment community in its home region. And for larger, outside investors, it provides a valuable "window" through which opportunities for follow-on funding can be identified.

Technology Focus

Varies considerably, depending on the region.

Eligibility

Entrepreneurs are usually local; investors are often from outside the region or even overseas. In some cases, investors must be "accredited investors" under Rules 501 and 506 of SEC Regulation D.

Procedures

- o **Application.** — Entrepreneurs submit an "investment opportunity profile;" investors submit an "investment interest profile."
- o **Evaluation.** — VCNs conduct no investigation to verify the accuracy or completeness of the information provided by entrepreneurs or investors. Neither do they evaluate or endorse the merits of the investment opportunities that are presented through their services.

Locations

In the course of this survey, we identified a total of 17 affiliated VCNs. They are listed below, alphabetically by State, with sponsors and mailing addresses.

- o **Georgia Capital Network**
Advanced Technology Development Center
Georgia Institute of Technology
430 10th Street, N.W., Suite N-116
Atlanta, Georgia 30318
(404) 894-3575
- o **Heartland Venture Capital Network, Inc.**
1710 Orrington Avenue, Suite 200
Evanston, Illinois 60201
(312) 864-7970
- o **Iowa Venture Capital Network**
2700 College Road
Box 4-C
Council Bluffs, Iowa 51502
(712) 325-3437
- o **Mid-Atlantic Venture Capital Network**
Michael D. Dingman Center for Entrepreneurship
College of Business and Management
University of Maryland
College Park, Maryland 20742-7215
(301) 454-8080

- Upper Peninsula Venture Capital Network, Inc.
P.O. Box 7107
Marquette, Michigan 49855
(906) 227-2406
- Venture Capital Network of Minnesota
Small Business Development Center
23 Empire Drive
Saint Paul, Minnesota 55103
(612) 223-8663
- Mississippi Venture Capital Clearinghouse;
Enterprise Development Division
Mississippi Department of Economic Development
1300 Walter Sillers Building
P.O. Box 849
Jackson, Mississippi
(601) 982-6425
- Nebraska Venture Capital Network
University of Nebraska at Omaha
1313 Farnham, Suite 132
Omaha, Nebraska 68182-0423
(402) 595-2381
- Venture Capital Network, Inc.
Whittemore School of Business
P.O. Box 882
Durham, New Hampshire 03824
(603) 743-3993
- Venture Capital Network of New York, Inc.
P.O. Box 248
Lake Placid, New York 12946
(518) 564-3227
- Northwest Capital Network
Oregon Resource and Technology Development Corporation
P.O. Box 25230
Portland, Oregon 97225-0230
(503) 294-0643
- Private Investor Network
Economic Enterprise Institute
University of South Carolina at Aiken
Aiken, South Carolina 29801
(803) 648-6851
- Tennessee Venture Capital Network
7 Cope Administration Building
Middle Tennessee State University
Murfreesboro, Tennessee 37132
(615) 898-2512

- o Capital Formation Network
2800 Citicorp Center
1200 Smith Street
Houston, Texas 77002
(713) 658-0300
- o Venture Capital Network of Texas, Inc.
University of Texas at San Antonio
P.O. Box 690870
San Antonio, Texas 78269-0870
(512) 691-4318
- o Washington Investment Network
Washington State Business Assistance Center
919 Lakeridge Way, S.W., Suite A
Olympia, Washington 98502
(206) 753-5632
- o Wyoming Investor Network
Casper College SBDC
130 North Ash Street, Suite A
Casper, Wyoming 82601
(307) 235-4825

